

|             |  |        |         |
|-------------|--|--------|---------|
| Name        | OJ990405_10.9819.C12.o2.gp   | Method | AAT/GAP |
| Start       | 2874   | End    | 3738    |
| GI          | 16049_1.R1084  | Score  | 1250    |
| Exons       | 2874..3390, 3470..3597, 3687..3738   |        |         |
| GI Descrip. | '4490317/emb CAB38808.1  3.0e-16 (AL035678) putative protein [Arabidopsis thaliana]' |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21700  | Seq. ID | OJ990405_10.9819.C12 |
| Gene No. | 45265  | Strand  | -                    |
| Start    | 3223   | End     | 7484                 |
| Name     | OJ990405_10.9819.C12.o2.gs   | Method  | GENSCAN              |
| Start    | 3223   | End     | 7484                 |
| GI       | none   | Score   | .82                  |
| Exons    | 3223..3390, 3470..3598, 3687..3830, 3944..4113, 5255..5342, 5949..5993, 6833..7233, 7268..7484 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21700  | Seq. ID | OJ990405_10.9819.C12 |
| Gene No.    | 45265  | Strand  | -                    |
| Start       | 3223   | End     | 7484                 |
| Name        | OJ990405_10.9819.C12.o2.np   | Method  | AAT/NAP              |
| Start       | 3251   | End     | 6988                 |
| GI          | 4490317  | Score   | 468                  |
| Exons       | 3251..3390, 3470..3598, 3687..3830, 3944..4113, 5255..5361, 6803..6988 |         |                      |
| GI Descrip. | (AL035678) putative protein [Arabidopsis thaliana]                     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21700  | Seq. ID | OJ990405_10.9819.C12 |
| Gene No. | 45266  | Strand  | -                    |
| Start    | 7415   | End     | 7568                 |
| Name     | OJ990405_10.9819.C12.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 141  | End     | 2171                 |
| GI       | none   | Score   | 322                  |
| Exons    | 141..371, 141..212, 305..373, 415..552, 477..557, 477..593, 478..594, 686..874, 688..873, 1270..1461, 1272..1454, 1565..1633, 1576..1632, 2049..2132, 2052..2138, 2053..2139, 2139..2171, 2140..2169 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21700  | Seq. ID | OJ990405_10.9819.C12 |
| Gene No. | 45266  | Strand  | -                    |
| Start    | 7415   | End     | 7568                 |
| Name     | OJ990405_10.9819.C12.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 150  | End     | 2172                 |
| GI       | none   | Score   | 325                  |
| Exons    | 150..212, 156..371, 305..373, 477..590, 478..594, 686..874, 688..873, 1270..1455, 1272..1454, 1567..1632, 1568..1633, 2052..2138, 2053..2139, 2053..2139, 2119..2172, 2139..2171 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21700  | Seq. ID | OJ990405_10.9819.C12 |
| Gene No. | 45266  | Strand  | -                    |
| Start    | 7415   | End     | 7568                 |
| Name     | OJ990405_10.9819.C12.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 150  | End     | 2142                 |
| GI       | none   | Score   | 326                  |
| Exons    | 150..212, 156..371, 203..232, 305..370, 477..593, 478..594, 686..874, 688..873, 1270..1461, 1272..1454, 1423..1461, 1565..1633, 1566..1631, 1579..1632, 2052..2138, 2053..2139, 2071..2142 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21700  | Seq. ID | OJ990405_10.9819.C12 |
| Gene No. | 45266  | Strand  | -                    |
| Start    | 7415   | End     | 7568                 |
| Name     | OJ990405_10.9819.C12.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 734  | End     | 1633                 |
| GI       | none   | Score   | 213                  |
| Exons    | 734..874, 736..873, 1270..1461, 1271..1366, 1272..1454, 1423..1461, 1565..1633, 1567..1602 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21700  | Seq. ID | OJ990405_10.9819.C12 |
| Gene No. | 45266  | Strand  | -                    |
| Start    | 7415   | End     | 7568                 |
| Name     | OJ990405_10.9819.C12.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 3238   | End     | 6955                 |
| GI       | none   | Score   | 199                  |
| Exons    | 3238..3390, 3242..3391, 3465..3590, 3470..3601, 3473..3601, 3687..3821, 3688..3828, 3688..3828, 3939..4073, 3943..4116, 3944..4141, 3944..4114, 5251..5346, 5254..5343, 5255..5344, 5529..5657, 5537..5656, 5563..5658, 5582..5668, 5932..6012, 5934..5993, 6881..6955 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21700  | Seq. ID | OJ990405_10.9819.C12 |
| Gene No. | 45266  | Strand  | -                    |
| Start    | 7415   | End     | 7568                 |
| Name     | OJ990405_10.9819.C12.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3238   | End     | 3595                 |
| GI       | none   | Score   | 147                  |
| Exons    | 3238..3393, 3242..3391, 3250..3402, 3473..3595, 3474..3569, 3515..3595 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21700  | Seq. ID | OJ990405_10.9819.C12 |
| Gene No. | 45266  | Strand  | -                    |
| Start    | 7415   | End     | 7568                 |
| Name     | OJ990405_10.9819.C12.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3705   | End     | 5641                 |
| GI       | none   | Score   | 93                   |
| Exons    | 3705..3833, 3705..3824, 3728..3829, 3939..4034, 3941..4114, 5251..5343, 5253..5345, 5256..5345, 5579..5641 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21700                      | Seq. ID | OJ990405_10.9819.C12 |
| Gene No. | 45266                      | Strand  | -                    |
| Start    | 7415                       | End     | 7568                 |
| Name     | OJ990405_10.9819.C12.o3.gp | Method  | AAT/GAP              |
| Start    | 7415                       | End     | 7568                 |
| GI       | none                       | Score   | 269                  |
| Exons    | 7415..7568                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21701  | Seq. ID | OJ990405_10.9819.C13 |
| Gene No.    | 45267  | Strand  | +                    |
| Start       | 93   | End     | 230                  |
| Name        | OJ990405_10.9819.C13.o1.gp   | Method  | AAT/GAP              |
| Start       | 93   | End     | 230                  |
| GI          | 533_1.R1084  | Score   | 204                  |
| Exons       | 93..230  |         |                      |
| GI Descrip. | '113172/sp P15543 ACP3_HORVU 9.0e-52 ACYL CARRIER PROTEIN III PRECURSOR (ACP III) >gi_100561_pir_S17928 acyl carrier protein |         |                      |



3 - barley >gi\_166971 (M58754) acyl carrier protein III [Hordeum vulgare]'

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21701                              | Seq. ID | OJ990405_10.9819.C13 |
| Gene No. | 45268                              | Strand  | -                    |
| Start    | 1553                               | End     | 3399                 |
| Name     | OJ990405_10.9819.C13.o1.gs         | Method  | GENSCAN              |
| Start    | 1553                               | End     | 3399                 |
| GI       | none                               | Score   | .43                  |
| Exons    | 1553..1694, 3042..3096, 3348..3399 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21702                      | Seq. ID | OJ990405_10.9819.C14 |
| Gene No. | 45269                      | Strand  | +                    |
| Start    | 104                        | End     | 1214                 |
| Name     | OJ990405_10.9819.C14.o1.gs | Method  | GENSCAN              |
| Start    | 104                        | End     | 1214                 |
| GI       | none                       | Score   | .81                  |
| Exons    | 104..288, 898..1214        |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21702  | Seq. ID | OJ990405_10.9819.C14 |
| Gene No. | 45270  | Strand  | -                    |
| Start    | 2793   | End     | 6953                 |
| Name     | OJ990405_10.9819.C14.o2.gs   | Method  | GENSCAN              |
| Start    | 2793   | End     | 5824                 |
| GI       | none   | Score   | .63                  |
| Exons    | 2793..2837, 3200..3330, 3968..4180, 4973..5099, 5206..5421, 5535..5824 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21702  | Seq. ID | OJ990405_10.9819.C14 |
| Gene No.    | 45270  | Strand  | -                    |
| Start       | 2793   | End     | 6953                 |
| Name        | OJ990405_10.9819.C14.o1.np                                 | Method  | AAT/NAP              |
| Start       | 3501   | End     | 6953                 |
| GI          | 4586112  | Score   | 450                  |
| Exons       | 3501..3528, 4794..5099, 5206..5411, 5531..5785, 6908..6953 |         |                      |
| GI Descrip. | (AL049638) putative protein [Arabidopsis thaliana]         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21702  | Seq. ID | OJ990405_10.9819.C14 |
| Gene No.    | 45270  | Strand  | -                    |
| Start       | 2793   | End     | 6953                 |
| Name        | OJ990405_10.9819.C14.o1.gp   | Method  | AAT/GAP              |
| Start       | 4770   | End     | 5336                 |
| GI          | 63580.1.R1084  | Score   | 823                  |
| Exons       | 4770..5099, 5206..5336   |         |                      |
| GI Descrip. | '4586112/emb CAB40948.1  2.0e-37 (AL049638) putative protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21702  | Seq. ID | OJ990405_10.9819.C14 |
| Gene No. | 45270  | Strand  | -                    |
| Start    | 2793   | End     | 6953                 |
| Name     | OJ990405_10.9819.C14.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 4937   | End     | 5350                 |
| GI       | none   | Score   | 55                   |
| Exons    | 4937..4990, 4937..5014, 4945..5094, 5016..5102, 5032..5100, 5205..5345, 5206..5346, 5213..5350 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21702 | Seq. ID | OJ990405_10.9819.C14 |
|----------|-------|---------|----------------------|

|          |  |        |                 |
|----------|--|--------|-----------------|
| Gene No. | 45270  | Strand | -               |
| Start    | 2793   | End    | 6953            |
| Name     | OJ990405_10.9819.C14.o1.ts   | Method | TBLASTX:Soybean |
| Start    | 4958   | End    | 5666            |
| GI       | none   | Score  | 103             |
| Exons    | 4958..5008, 5019..5102, 5206..5346, 5207..5350, 5329..5409, 5532..5666 |        |                 |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21703                      | Seq. ID | OJ990405_10.9819.C15 |
| Gene No. | 45271                      | Strand  | +                    |
| Start    | 131                        | End     | 466                  |
| Name     | OJ990405_10.9819.C15.o1.gs | Method  | GENSCAN              |
| Start    | 131                        | End     | 466                  |
| GI       | none                       | Score   | .56                  |
| Exons    | 131..466                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21704  | Seq. ID | OJ990405_10.9819.C18 |
| Gene No.    | 45272  | Strand  | +                    |
| Start       | 1309   | End     | 4522                 |
| Name        | OJ990405_10.9819.C18.o1.np                     | Method  | AAT/NAP              |
| Start       | 1309   | End     | 4350                 |
| GI          | 3094014  | Score   | 200                  |
| Exons       | 1309..1374, 1557..1651, 2551..2659, 4264..4350 |         |                      |
| GI Descrip. | (AF060862) unknown [Homo sapiens]              |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21704  | Seq. ID | OJ990405_10.9819.C18 |
| Gene No. | 45272  | Strand  | +                    |
| Start    | 1309   | End     | 4522                 |
| Name     | OJ990405_10.9819.C18.o2.gs   | Method  | GENSCAN              |
| Start    | 1485   | End     | 4522                 |
| GI       | none   | Score   | .84                  |
| Exons    | 1485..1688, 1705..2015, 2551..2659, 4035..4104, 4264..4382, 4400..4522 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21704                      | Seq. ID | OJ990405_10.9819.C18 |
| Gene No. | 45272                      | Strand  | +                    |
| Start    | 1309                       | End     | 4522                 |
| Name     | OJ990405_10.9819.C18.o1.gp | Method  | AAT/GAP              |
| Start    | 2551                       | End     | 2663                 |
| GI       | none                       | Score   | 174                  |
| Exons    | 2551..2663                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21704                      | Seq. ID | OJ990405_10.9819.C18 |
| Gene No. | 45273                      | Strand  | +                    |
| Start    | 5870                       | End     | 6298                 |
| Name     | OJ990405_10.9819.C18.o3.gp | Method  | AAT/GAP              |
| Start    | 5870                       | End     | 6298                 |
| GI       | none                       | Score   | 808                  |
| Exons    | 5870..6298                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21704                      | Seq. ID | OJ990405_10.9819.C18 |
| Gene No. | 45274                      | Strand  | -                    |
| Start    | 179                        | End     | 818                  |
| Name     | OJ990405_10.9819.C18.o1.gs | Method  | GENSCAN              |
| Start    | 179                        | End     | 818                  |
| GI       | none                       | Score   | .92                  |
| Exons    | 179..588, 665..818         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21704                      | Seq. ID | OJ990405_10.9819.C18 |
| Gene No. | 45275                      | Strand  | -                    |
| Start    | 4268                       | End     | 4676                 |
| Name     | OJ990405_10.9819.C18.o2.gp | Method  | AAT/GAP              |
| Start    | 4268                       | End     | 4676                 |
| GI       | none                       | Score   | 739                  |
| Exons    | 4268..4676                 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21704  | Seq. ID | OJ990405_10.9819.C18 |
| Gene No. | 45276  | Strand  | -                    |
| Start    | 4941   | End     | 12118                |
| Name     | OJ990405_10.9819.C18.o3.gs   | Method  | GENSCAN              |
| Start    | 4941   | End     | 12118                |
| GI       | none   | Score   | .51                  |
| Exons    | 4941..5060, 5152..5309, 6146..6307, 6388..6930, 6977..7508, 8377..8568, 10532..10673, 11112..11158, 12013..12118 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21705  | Seq. ID | OJ990405_10.9819.C19 |
| Gene No.    | 45277  | Strand  | +                    |
| Start       | 60   | End     | 9591                 |
| Name        | OJ990405_10.9819.C19.o1.np   | Method  | AAT/NAP              |
| Start       | 60   | End     | 2797                 |
| GI          | 5734621  | Score   | 155                  |
| Exons       | 60..285, 397..447, 2744..2797  |         |                      |
| GI Descrip. | (AP000391) ESTs AU067992(C11433), AU077424(C11433) correspond to a region of the predicted gene.; Similar to ABC transporter-7 (U43892) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21705  | Seq. ID | OJ990405_10.9819.C19 |
| Gene No. | 45277  | Strand  | +                    |
| Start    | 60   | End     | 9591                 |
| Name     | OJ990405_10.9819.C19.o1.gs   | Method  | GENSCAN              |
| Start    | 1910   | End     | 9591                 |
| GI       | none   | Score   | .68                  |
| Exons    | 1910..1920, 3256..3365, 3634..3704, 3730..3778, 4412..4525, 4617..5367, 5450..5693, 5783..6247, 6544..6677, 8561..8685, 8894..9089, 9321..9591 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21705   | Seq. ID | OJ990405_10.9819.C19 |
| Gene No.    | 45277   | Strand  | +                    |
| Start       | 60  | End     | 9591                 |
| Name        | OJ990405_10.9819.C19.o1.gp  | Method  | AAT/GAP              |
| Start       | 3260  | End     | 4487                 |
| GI          | uC-osflcyp033e07b1  | Score   | 840                  |
| Exons       | 3260..3365, 3634..3778, 4193..4283, 4372..4487  |         |                      |
| GI Descrip. | '3047084 3.0e-58 (AF058914) similar to aminoacyl-tRNA synthetases [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21705  | Seq. ID | OJ990405_10.9819.C19 |
| Gene No. | 45277  | Strand  | +                    |
| Start    | 60   | End     | 9591                 |
| Name     | OJ990405_10.9819.C19.o2.np   | Method  | AAT/NAP              |
| Start    | 3642   | End     | 6759                 |
| GI       | 6815089  | Score   | 2981                 |
| Exons    | 3642..3778, 4193..4283, 4372..4525, 4617..5693, 5783..6247, 6544..6759 |         |                      |

GI Descrip. (AP001081) Similar to glutamyl-tRNA synthetase (AF067773) [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21705                      | Seq. ID | OJ990405_10.9819.C19 |
| Gene No. | 45277                      | Strand  | +                    |
| Start    | 60                         | End     | 9591                 |
| Name     | OJ990405_10.9819.C19.o2.gp | Method  | AAT/GAP              |
| Start    | 5544                       | End     | 6076                 |
| GI       | 4968606                    | Score   | 831                  |
| Exons    | 5544..5693, 5783..6076     |         |                      |

GI Descrip. 3047084 3.0e-58 (AF058914) similar to aminoacyl-tRNA synthetases [Arabidopsis thaliana]

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21705   | Seq. ID | OJ990405_10.9819.C19 |
| Gene No. | 45278   | Strand  | -                    |
| Start    | 3414  | End     | 12513                |
| Name     | OJ990405_10.9819.C19.o3.np                          | Method  | AAT/NAP              |
| Start    | 3414  | End     | 12513                |
| GI       | 5430752   | Score   | 87                   |
| Exons    | 3414..3616, 9952..10142, 11459..11582, 12430..12513 |         |                      |

GI Descrip. (AC007504) Hypothetical Protein [Arabidopsis thaliana]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21705  | Seq. ID | OJ990405_10.9819.C19 |
| Gene No. | 45278  | Strand  | -                    |
| Start    | 3414   | End     | 12513                |
| Name     | OJ990405_10.9819.C19.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 3651   | End     | 6741                 |
| GI       | none   | Score   | 88                   |
| Exons    | 3651..3779, 4369..4527, 4374..4526, 4603..4800, 4604..4783, 4793..5425, 4813..5427, 5393..5692, 5400..5684, 5435..5695, 5773..5982, 5774..5992, 5947..6099, 5975..6091, 6088..6249, 6092..6250, 6541..6741, 6567..6737 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21705  | Seq. ID | OJ990405_10.9819.C19 |
| Gene No. | 45278  | Strand  | -                    |
| Start    | 3414   | End     | 12513                |
| Name     | OJ990405_10.9819.C19.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3657   | End     | 6765                 |
| GI       | none   | Score   | 107                  |
| Exons    | 3657..3779, 4369..4527, 4374..4526, 4604..4786, 4609..4755, 4790..5425, 4815..5414, 4816..5427, 5400..5684, 5420..5692, 5435..5695, 5776..6114, 5780..6100, 6083..6235, 6092..6250, 6103..6249, 6541..6765, 6561..6758 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21705  | Seq. ID | OJ990405_10.9819.C19 |
| Gene No. | 45278  | Strand  | -                    |
| Start    | 3414   | End     | 12513                |
| Name     | OJ990405_10.9819.C19.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 4458   | End     | 5131                 |
| GI       | none   | Score   | 105                  |
| Exons    | 4458..4526, 4459..4527, 4587..4721, 4590..5027, 4603..5037, 4604..5038, 4977..5099, 4984..5124, 5018..5131, 5027..5131 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21705                      | Seq. ID | OJ990405_10.9819.C19 |
| Gene No. | 45278                      | Strand  | -                    |
| Start    | 3414                       | End     | 12513                |
| Name     | OJ990405_10.9819.C19.o3.tm | Method  | TBLASTX:Maize        |

Start 5165  
GI none  
Exons 5165..5416, 5170..5415

End 5416  
Score 430

Seq. No. 21705  
Gene No. 45278  
Start 3414  
Name OJ990405\_10.9819.C19.o1.tm  
Start 5417  
GI none  
Exons 5417..5692, 5418..5684, 5420..5695, 5774..6250, 5780..6238, 5782..6249, 6538..6762, 6541..6807, 6542..6772, 6561..6782

Seq. ID OJ990405\_10.9819.C19  
Strand -  
End 12513  
Method TBLASTX:Maize  
End 6807  
Score 459

Seq. No. 21705  
Gene No. 45278  
Start 3414  
Name OJ990405\_10.9819.C19.o3.gp  
Start 6640  
GI none  
Exons 6640..7018

Seq. ID OJ990405\_10.9819.C19  
Strand -  
End 12513  
Method AAT/GAP  
End 7018  
Score 730

Seq. No. 21706  
Gene No. 45279  
Start 79  
Name OJ990405\_10.9819.C20.o1.tm  
Start 74  
GI none  
Exons 74..484, 74..448, 98..445, 152..235, 290..508, 500..1069, 515..1090, 710..1096, 854..1045, 911..1105, 1061..1354, 1092..1568, 1098..1400, 1098..1478, 1122..1580, 1227..1592, 1236..1595

Seq. ID OJ990405\_10.9819.C20  
Strand +  
End 1927  
Method TBLASTX:Maize  
End 1595  
Score 230

Seq. No. 21706  
Gene No. 45279  
Start 79  
Name OJ990405\_10.9819.C20.o1.gs  
Start 79  
GI none  
Exons 79..355, 440..1077, 1145..1289, 1843..1927

Seq. ID OJ990405\_10.9819.C20  
Strand +  
End 1927  
Method GENSCAN  
End 1927  
Score .79

Seq. No. 21706  
Gene No. 45279  
Start 79  
Name OJ990405\_10.9819.C20.o1.tc  
Start 83  
GI none  
Exons 83..442, 89..358, 149..376, 197..511, 260..469, 353..481, 479..748, 487..732, 503..661, 503..847, 563..754, 604..807, 605..952, 656..1057, 665..889, 767..982, 830..1096, 831..962, 860..1090, 872..1096, 1095..1376, 1104..1310, 1106..1378, 1134..1475, 1188..1385, 1221..1589, 1229..1522, 1257..1508, 1287..1595, 1307..1507, 1413..1595, 1439..1576

Seq. ID OJ990405\_10.9819.C20  
Strand +  
End 1927  
Method TBLASTX:Cress  
End 1595  
Score 137

Seq. No. 21706  
Gene No. 45279  
Start 79  
Name OJ990405\_10.9819.C20.o1.ts  
Method TBLASTX:Soybean

Seq. ID OJ990405\_10.9819.C20  
Strand +  
End 1927  
Method TBLASTX:Soybean

Start 92 End 1580  
 GI none Score 150  
 Exons 92..388, 155..481, 251..493, 461..691, 497..796, 554..901,  
 583..720, 664..984, 665..1006, 791..1093, 878..1096, 1092..1217,  
 1098..1322, 1098..1376, 1107..1415, 1121..1303, 1194..1520,  
 1299..1556, 1401..1580

Seq. No. 21707 Seq. ID OJ990405\_10.9819.C23  
 Gene No. 45280 Strand +  
 Start 70 End 1253  
 Name OJ990405\_10.9819.C23.o1.np Method AAT/NAP  
 Start 70 End 1253  
 GI 5042439 Score 404  
 Exons 70..292, 786..834, 913..1253  
 GI Descrip. (AC007789) putative DNA-binding protein [Oryza sativa]

Seq. No. 21708 Seq. ID OJ990405\_10.9819.C24  
 Gene No. 45281 Strand +  
 Start 238 End 1491  
 Name OJ990405\_10.9819.C24.o1.gs Method GENSCAN  
 Start 238 End 1491  
 GI none Score .68  
 Exons 238..250, 549..727, 1276..1491

Seq. No. 21709 Seq. ID OJ990415\_10.9819.C1  
 Gene No. 45282 Strand +  
 Start 247 End 490  
 Name OJ990415\_10.9819.C1.o1.gs Method GENSCAN  
 Start 247 End 490  
 GI none Score .65  
 Exons 247..490

Seq. No. 21709 Seq. ID OJ990415\_10.9819.C1  
 Gene No. 45283 Strand -  
 Start 270 End 770  
 Name OJ990415\_10.9819.C1.o1.np Method AAT/NAP  
 Start 270 End 770  
 GI 5852180 Score 271  
 Exons 270..644, 691..770  
 GI Descrip. (AL117265) zhb00010.1 [Oryza sativa]

Seq. No. 21710 Seq. ID OJ990415\_10.9819.C2  
 Gene No. 45284 Strand -  
 Start 275 End 449  
 Name OJ990415\_10.9819.C2.o1.gs Method GENSCAN  
 Start 275 End 449  
 GI none Score .48  
 Exons 275..449

Seq. No. 21711 Seq. ID OJ990415\_10.9819.C4  
 Gene No. 45285 Strand +  
 Start 2867 End 2984  
 Name OJ990415\_10.9819.C4.o2.np Method AAT/NAP  
 Start 2867 End 2984  
 GI 6721512 Score 57  
 Exons 2867..2984  
 GI Descrip. (AP001072) hypothetical protein [Oryza sativa]

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21711  | Seq. ID | OJ990415_10.9819.C4 |
| Gene No. | 45286  | Strand  | +                   |
| Start    | 3048   | End     | 7977                |
| Name     | OJ990415_10.9819.C4.o2.gs  | Method  | GENSCAN             |
| Start    | 3048   | End     | 6812                |
| GI       | none   | Score   | .74                 |
| Exons    | 3048..3132, 3332..3395, 3429..3504, 3768..3979, 4076..4267, 4320..4534, 4615..4739, 4851..5024, 5058..5116, 5187..5819, 6064..6209, 6295..6812 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21711  | Seq. ID | OJ990415_10.9819.C4 |
| Gene No.    | 45286  | Strand  | +                   |
| Start       | 3048   | End     | 7977                |
| Name        | OJ990415_10.9819.C4.o3.np                      | Method  | AAT/NAP             |
| Start       | 3787   | End     | 7977                |
| GI          | 6907089  | Score   | 261                 |
| Exons       | 3787..4521, 6774..6840, 7920..7977             |         |                     |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21711   | Seq. ID | OJ990415_10.9819.C4 |
| Gene No.    | 45286   | Strand  | +                   |
| Start       | 3048  | End     | 7977                |
| Name        | OJ990415_10.9819.C4.o4.np   | Method  | AAT/NAP             |
| Start       | 3902  | End     | 5948                |
| GI          | 6721561   | Score   | 984                 |
| Exons       | 3902..3970, 4806..4985, 5058..5116, 5187..5948  |         |                     |
| GI Descrip. | (AP001073) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]<br>gi 6815086 dbj BAA90372.1  (AP001081) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21711  | Seq. ID | OJ990415_10.9819.C4 |
| Gene No.    | 45287  | Strand  | +                   |
| Start       | 13375  | End     | 14051               |
| Name        | OJ990415_10.9819.C4.o7.np                      | Method  | AAT/NAP             |
| Start       | 13375  | End     | 14051               |
| GI          | 6721512  | Score   | 59                  |
| Exons       | 13375..13502, 14019..14051                     |         |                     |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21711  | Seq. ID | OJ990415_10.9819.C4 |
| Gene No.    | 45288  | Strand  | -                   |
| Start       | 92   | End     | 2937                |
| Name        | OJ990415_10.9819.C4.o1.np  | Method  | AAT/NAP             |
| Start       | 92   | End     | 1819                |
| GI          | 6056425  | Score   | 739                 |
| Exons       | 92..184, 328..641, 721..843, 1708..1819                          |         |                     |
| GI Descrip. | (AC009525) Putative ribosomal protein L19 [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21711                     | Seq. ID | OJ990415_10.9819.C4 |
| Gene No. | 45288                     | Strand  | -                   |
| Start    | 92                        | End     | 2937                |
| Name     | OJ990415_10.9819.C4.o1.gp | Method  | AAT/GAP             |
| Start    | 328                       | End     | 1852                |
| GI       | 5667274                   | Score   | 997                 |

Exons 328..641, 721..843, 1708..1852  
 GI Descrip. 6056425/gb|AAF02889.1|AC009525\_23 3.0e-64 (AC009525) Putative ribosomal protein L19 [Arabidopsis thaliana]

Seq. No. 21711 Seq. ID OJ990415\_10.9819.C4  
 Gene No. 45288 Strand -  
 Start 92 End 2937  
 Name OJ990415\_10.9819.C4.o1.gs Method GENSCAN  
 Start 328 End 2937  
 GI none Score .87  
 Exons 328..641, 721..843, 1708..1845, 2094..2187, 2845..2937

Seq. No. 21711 Seq. ID OJ990415\_10.9819.C4  
 Gene No. 45289 Strand -  
 Start 7430 End 14051  
 Name OJ990415\_10.9819.C4.o1.tm Method TBLASTX:Maize  
 Start 300 End 1820  
 GI none Score 389  
 Exons 300..641, 326..640, 328..642, 401..643, 699..839, 718..840, 719..841, 719..841, 1700..1819, 1701..1820

Seq. No. 21711 Seq. ID OJ990415\_10.9819.C4  
 Gene No. 45289 Strand -  
 Start 7430 End 14051  
 Name OJ990415\_10.9819.C4.o2.tw Method TBLASTX:Wheat  
 Start 315 End 1832  
 GI none Score 398  
 Exons 315..641, 326..640, 328..642, 401..643, 699..839, 715..801, 718..840, 719..841, 720..842, 1696..1746, 1700..1831, 1701..1832

Seq. No. 21711 Seq. ID OJ990415\_10.9819.C4  
 Gene No. 45289 Strand -  
 Start 7430 End 14051  
 Name OJ990415\_10.9819.C4.o1.tc Method TBLASTX:Cress  
 Start 328 End 1989  
 GI none Score 195  
 Exons 328..642, 375..539, 401..643, 719..871, 720..839, 1700..1825, 1701..1829, 1933..1989

Seq. No. 21711 Seq. ID OJ990415\_10.9819.C4  
 Gene No. 45289 Strand -  
 Start 7430 End 14051  
 Name OJ990415\_10.9819.C4.o1.ts Method TBLASTX:Soybean  
 Start 328 End 1820  
 GI none Score 231  
 Exons 328..642, 375..641, 401..643, 699..839, 719..841, 720..842, 1700..1819, 1701..1820

Seq. No. 21711 Seq. ID OJ990415\_10.9819.C4  
 Gene No. 45289 Strand -  
 Start 7430 End 14051  
 Name OJ990415\_10.9819.C4.o5.np Method AAT/NAP  
 Start 7430 End 10549  
 GI 5902445 Score 3092  
 Exons 7430..8671, 8711..10549  
 GI Descrip. (AB030283) GAG-POL precursor [Oryza sativa]



|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21711  | Seq. ID | OJ990415_10.9819.C4 |
| Gene No. | 45289  | Strand  | -                   |
| Start    | 7430   | End     | 14051               |
| Name     | OJ990415_10.9819.C4.o4.tw                                  | Method  | TBLASTX:Wheat       |
| Start    | 7439   | End     | 8047                |
| GI       | none   | Score   | 68                  |
| Exons    | 7439..7570, 7452..7565, 7595..8047, 7791..7898, 7947..8033 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21711                     | Seq. ID | OJ990415_10.9819.C4 |
| Gene No. | 45289                     | Strand  | -                   |
| Start    | 7430                      | End     | 14051               |
| Name     | OJ990415_10.9819.C4.o5.tw | Method  | TBLASTX:Wheat       |
| Start    | 8171                      | End     | 8554                |
| GI       | none                      | Score   | 202                 |
| Exons    | 8171..8554, 8172..8546    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21711                     | Seq. ID | OJ990415_10.9819.C4 |
| Gene No. | 45289                     | Strand  | -                   |
| Start    | 7430                      | End     | 14051               |
| Name     | OJ990415_10.9819.C4.o3.tm | Method  | TBLASTX:Maize       |
| Start    | 8249                      | End     | 8554                |
| GI       | none                      | Score   | 182                 |
| Exons    | 8249..8554, 8250..8537    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21711                     | Seq. ID | OJ990415_10.9819.C4 |
| Gene No. | 45289                     | Strand  | -                   |
| Start    | 7430                      | End     | 14051               |
| Name     | OJ990415_10.9819.C4.o8.tw | Method  | TBLASTX:Wheat       |
| Start    | 8759                      | End     | 9013                |
| GI       | none                      | Score   | 75                  |
| Exons    | 8759..9013, 8763..9011    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21711  | Seq. ID | OJ990415_10.9819.C4 |
| Gene No. | 45289  | Strand  | -                   |
| Start    | 7430   | End     | 14051               |
| Name     | OJ990415_10.9819.C4.o6.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 9056   | End     | 9464                |
| GI       | none   | Score   | 49                  |
| Exons    | 9056..9121, 9056..9229, 9237..9464, 9239..9463 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21711                     | Seq. ID | OJ990415_10.9819.C4 |
| Gene No. | 45289                     | Strand  | -                   |
| Start    | 7430                      | End     | 14051               |
| Name     | OJ990415_10.9819.C4.o2.ts | Method  | TBLASTX:Soybean     |
| Start    | 9554                      | End     | 9979                |
| GI       | none                      | Score   | 71                  |
| Exons    | 9554..9979, 9795..9947    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21711  | Seq. ID | OJ990415_10.9819.C4 |
| Gene No. | 45289  | Strand  | -                   |
| Start    | 7430   | End     | 14051               |
| Name     | OJ990415_10.9819.C4.o6.np  | Method  | AAT/NAP             |
| Start    | 9588   | End     | 14051               |
| GI       | 5902444  | Score   | 473                 |
| Exons    | 9588..9668, 10951..11995, 12297..12387, 12568..12654, 14012..14051 |         |                     |

GI Descrip. (AB030283) GAG-POL precursor [Oryza sativa]

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21711   | Seq. ID | OJ990415_10.9819.C4 |
| Gene No.    | 45289   | Strand  | -                   |
| Start       | 7430  | End     | 14051               |
| Name        | OJ990415_10.9819.C4.o3.tw                                   | Method  | TBLASTX:Wheat       |
| Start       | 9609  | End     | 10033               |
| GI          | none  | Score   | 270                 |
| Exons       | 9609..9986, 9611..10033, 9644..9988, 9892..9993             |         |                     |
|             |   |         |                     |
| Seq. No.    | 21711   | Seq. ID | OJ990415_10.9819.C4 |
| Gene No.    | 45289   | Strand  | -                   |
| Start       | 7430  | End     | 14051               |
| Name        | OJ990415_10.9819.C4.o4.tm                                   | Method  | TBLASTX:Maize       |
| Start       | 9707  | End     | 10090               |
| GI          | none  | Score   | 124                 |
| Exons       | 9707..10090, 9708..9986, 9874..10056                        |         |                     |
|             |   |         |                     |
| Seq. No.    | 21711   | Seq. ID | OJ990415_10.9819.C4 |
| Gene No.    | 45289   | Strand  | -                   |
| Start       | 7430  | End     | 14051               |
| Name        | OJ990415_10.9819.C4.o2.tm                                   | Method  | TBLASTX:Maize       |
| Start       | 10118   | End     | 10474               |
| GI          | none  | Score   | 234                 |
| Exons       | 10118..10474, 10119..10433                                  |         |                     |
|             |   |         |                     |
| Seq. No.    | 21711   | Seq. ID | OJ990415_10.9819.C4 |
| Gene No.    | 45289   | Strand  | -                   |
| Start       | 7430  | End     | 14051               |
| Name        | OJ990415_10.9819.C4.o1.tw                                   | Method  | TBLASTX:Wheat       |
| Start       | 10148   | End     | 10603               |
| GI          | none  | Score   | 352                 |
| Exons       | 10148..10600, 10149..10589, 10163..10603                    |         |                     |
|             |   |         |                     |
| Seq. No.    | 21711   | Seq. ID | OJ990415_10.9819.C4 |
| Gene No.    | 45289   | Strand  | -                   |
| Start       | 7430  | End     | 14051               |
| Name        | OJ990415_10.9819.C4.o3.ts                                   | Method  | TBLASTX:Soybean     |
| Start       | 10199   | End     | 10564               |
| GI          | none  | Score   | 97                  |
| Exons       | 10199..10333, 10340..10564                                  |         |                     |
|             |   |         |                     |
| Seq. No.    | 21711   | Seq. ID | OJ990415_10.9819.C4 |
| Gene No.    | 45289   | Strand  | -                   |
| Start       | 7430  | End     | 14051               |
| Name        | OJ990415_10.9819.C4.o7.tw                                   | Method  | TBLASTX:Wheat       |
| Start       | 11518   | End     | 11916               |
| GI          | none  | Score   | 250                 |
| Exons       | 11518..11916  |         |                     |
|             |   |         |                     |
| Seq. No.    | 21712   | Seq. ID | OJ990415_10.9819.C5 |
| Gene No.    | 45290   | Strand  | +                   |
| Start       | 293   | End     | 2505                |
| Name        | OJ990415_10.9819.C5.o1.np                                   | Method  | AAT/NAP             |
| Start       | 293   | End     | 2502                |
| GI          | 5922620   | Score   | 542                 |
| Exons       | 293..503, 617..972, 2362..2502                              |         |                     |
| GI Descrip. | (AP000492) EST D15357(C0514) corresponds to a region of the |         |                     |

predicted gene.; hypothetical protein [Oryza sativa]  
gi|6016853|dbj|BAA85196.1| (AP000570) EST D15357(C0514)  
corresponds to a region of the predicted gene.; hypothetical  
protein [Oryza sativa]

|          |                                  |         |                     |
|----------|----------------------------------|---------|---------------------|
| Seq. No. | 21712                            | Seq. ID | OJ990415_10.9819.C5 |
| Gene No. | 45290                            | Strand  | +                   |
| Start    | 293                              | End     | 2505                |
| Name     | OJ990415_10.9819.C5.o1.gs        | Method  | GENSCAN             |
| Start    | 756                              | End     | 2505                |
| GI       | none                             | Score   | .57                 |
| Exons    | 756..935, 2162..2370, 2391..2505 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21713                     | Seq. ID | OJ990415_10.9819.C6 |
| Gene No. | 45291                     | Strand  | +                   |
| Start    | 169                       | End     | 258                 |
| Name     | OJ990415_10.9819.C6.o1.gs | Method  | GENSCAN             |
| Start    | 169                       | End     | 258                 |
| GI       | none                      | Score   | .84                 |
| Exons    | 169..258                  |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21713                     | Seq. ID | OJ990415_10.9819.C6 |
| Gene No. | 45292                     | Strand  | +                   |
| Start    | 1372                      | End     | 2730                |
| Name     | OJ990415_10.9819.C6.o2.gs | Method  | GENSCAN             |
| Start    | 1372                      | End     | 2730                |
| GI       | none                      | Score   | .4                  |
| Exons    | 1372..1579, 2357..2730    |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 21713   | Seq. ID | OJ990415_10.9819.C6 |
| Gene No. | 45293   | Strand  | +                   |
| Start    | 3607  | End     | 10116               |
| Name     | OJ990415_10.9819.C6.o3.gs                       | Method  | GENSCAN             |
| Start    | 3607  | End     | 10107               |
| GI       | none  | Score   | .72                 |
| Exons    | 3607..3907, 7409..7662, 9206..9455, 9887..10107 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21713   | Seq. ID | OJ990415_10.9819.C6 |
| Gene No.    | 45293   | Strand  | +                   |
| Start       | 3607  | End     | 10116               |
| Name        | OJ990415_10.9819.C6.o1.np                                       | Method  | AAT/NAP             |
| Start       | 3616  | End     | 10116               |
| GI          | 4218120   | Score   | 300                 |
| Exons       | 3616..3878, 6760..6916, 7470..7658, 9206..9455, 9887..10116     |         |                     |
| GI Descrip. | (AL035353) Proline-rich APG-like protein [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21713  | Seq. ID | OJ990415_10.9819.C6 |
| Gene No. | 45294  | Strand  | +                   |
| Start    | 10940  | End     | 15080               |
| Name     | OJ990415_10.9819.C6.o4.gs  | Method  | GENSCAN             |
| Start    | 10940  | End     | 15080               |
| GI       | none   | Score   | .75                 |
| Exons    | 10940..11707, 11769..11987, 12942..13222, 13778..14520, 14623..15080 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 21713 | Seq. ID | OJ990415_10.9819.C6 |
| Gene No. | 45295 | Strand  | +                   |

|       |  |        |         |
|-------|--|--------|---------|
| Start | 15910                                    | End    | 17019   |
| Name  | OJ990415_10.9819.C6.o5.gs                | Method | GENSCAN |
| Start | 15910                                    | End    | 17019   |
| GI    | none                                     | Score  | .88     |
| Exons | 15910..15954, 16378..16503, 16879..17019 |        |         |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21713  | Seq. ID | OJ990415_10.9819.C6 |
| Gene No. | 45296  | Strand  | -                   |
| Start    | 17272  | End     | 22948               |
| Name     | OJ990415_10.9819.C6.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 1411   | End     | 9457                |
| GI       | none   | Score   | 191                 |
| Exons    | 1411..1584, 3697..3870, 3714..3872, 6749..6781, 6803..6847, 9209..9295, 9374..9457 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 21713                              | Seq. ID | OJ990415_10.9819.C6 |
| Gene No. | 45296                              | Strand  | -                   |
| Start    | 17272                              | End     | 22948               |
| Name     | OJ990415_10.9819.C6.o1.ts          | Method  | TBLASTX:Soybean     |
| Start    | 1420                               | End     | 3876                |
| GI       | none                               | Score   | 189                 |
| Exons    | 1420..1590, 3702..3866, 3703..3876 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 21713                      | Seq. ID | OJ990415_10.9819.C6 |
| Gene No. | 45296                      | Strand  | -                   |
| Start    | 17272                      | End     | 22948               |
| Name     | OJ990415_10.9819.C6.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 14283                      | End     | 14696               |
| GI       | none                       | Score   | 150                 |
| Exons    | 14283..14531, 14622..14696 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21713  | Seq. ID | OJ990415_10.9819.C6 |
| Gene No. | 45296  | Strand  | -                   |
| Start    | 17272  | End     | 22948               |
| Name     | OJ990415_10.9819.C6.o6.gs  | Method  | GENSCAN             |
| Start    | 17272  | End     | 22948               |
| GI       | none   | Score   | .65                 |
| Exons    | 17272..17520, 17562..17653, 17746..17859, 18016..18101, 18160..18284, 18598..18750, 19198..19244, 20365..20521, 22877..22948 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21713   | Seq. ID | OJ990415_10.9819.C6 |
| Gene No.    | 45296   | Strand  | -                   |
| Start       | 17272   | End     | 22948               |
| Name        | OJ990415_10.9819.C6.o4.np   | Method  | AAT/NAP             |
| Start       | 17542   | End     | 20705               |
| GI          | 4539658   | Score   | 127                 |
| Exons       | 17542..17604, 20365..20559, 20617..20705                          |         |                     |
| GI Descrip. | (AF061282) serine carboxypeptidase-like protein [Sorghum bicolor] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21713                     | Seq. ID | OJ990415_10.9819.C6 |
| Gene No. | 45296                     | Strand  | -                   |
| Start    | 17272                     | End     | 22948               |
| Name     | OJ990415_10.9819.C6.o3.np | Method  | AAT/NAP             |
| Start    | 17695                     | End     | 20709               |
| GI       | 4539658                   | Score   | 128                 |

Exons 17695..17725, 20358..20559, 20617..20709  
 GI Descrip. (AF061282) serine carboxypeptidase-like protein [Sorghum  
 bicolor]

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21714                                  | Seq. ID | OJ990415_10.9819.C7 |
| Gene No. | 45297                                  | Strand  | +                   |
| Start    | 52                                     | End     | 1039                |
| Name     | OJ990415_10.9819.C7.o1.gs              | Method  | GENSCAN             |
| Start    | 52                                     | End     | 1039                |
| GI       | none                                   | Score   | .94                 |
| Exons    | 52..162, 496..686, 779..870, 915..1039 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21714  | Seq. ID | OJ990415_10.9819.C7 |
| Gene No.    | 45298  | Strand  | +                   |
| Start       | 10033  | End     | 11369               |
| Name        | OJ990415_10.9819.C7.o2.np  | Method  | AAT/NAP             |
| Start       | 10033  | End     | 11369               |
| GI          | 4914384  | Score   | 150                 |
| Exons       | 10033..10108, 10719..10932, 11342..11369                               |         |                     |
| GI Descrip. | (AC007167) putative GDSL-motif lipase/hydrolase [Arabidopsis thaliana] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21714   | Seq. ID | OJ990415_10.9819.C7 |
| Gene No.    | 45298   | Strand  | +                   |
| Start       | 10033   | End     | 11369               |
| Name        | OJ990415_10.9819.C7.o1.gp   | Method  | AAT/GAP             |
| Start       | 10532   | End     | 10968               |
| GI          | 13677_1.R1084   | Score   | 722                 |
| Exons       | 10532..10968  |         |                     |
| GI Descrip. | '4914384/gb AAD32919.1 AC007167_1 5.0e-15 (AC007167) putative APG protein [Arabidopsis thaliana]' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21714                     | Seq. ID | OJ990415_10.9819.C7 |
| Gene No. | 45298                     | Strand  | +                   |
| Start    | 10033                     | End     | 11369               |
| Name     | OJ990415_10.9819.C7.o3.gs | Method  | GENSCAN             |
| Start    | 10673                     | End     | 10922               |
| GI       | none                      | Score   | 1                   |
| Exons    | 10673..10922              |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21714   | Seq. ID | OJ990415_10.9819.C7 |
| Gene No.    | 45299   | Strand  | -                   |
| Start       | 1898  | End     | 2669                |
| Name        | OJ990415_10.9819.C7.o1.np                               | Method  | AAT/NAP             |
| Start       | 1898  | End     | 2669                |
| GI          | 4680183   | Score   | 197                 |
| Exons       | 1898..1989, 2601..2669                                  |         |                     |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21714  | Seq. ID | OJ990415_10.9819.C7 |
| Gene No. | 45300  | Strand  | -                   |
| Start    | 4022   | End     | 9954                |
| Name     | OJ990415_10.9819.C7.o2.gs                      | Method  | GENSCAN             |
| Start    | 4022   | End     | 9954                |
| GI       | none   | Score   | .72                 |
| Exons    | 4022..4080, 6004..6093, 9220..9241, 9952..9954 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21715   | Seq. ID | OJ990415_10.9819.C8 |
| Gene No.    | 45301   | Strand  | +                   |
| Start       | 1118  | End     | 6224                |
| Name        | OJ990415_10.9819.C8.o1.gs   | Method  | GENSCAN             |
| Start       | 1118  | End     | 6195                |
| GI          | none  | Score   | .85                 |
| Exons       | 1118..1153, 3203..3290, 4123..4203, 5017..5141, 5388..5624, 5725..6195  |         |                     |
|             |   |         |                     |
| Seq. No.    | 21715   | Seq. ID | OJ990415_10.9819.C8 |
| Gene No.    | 45301   | Strand  | +                   |
| Start       | 1118  | End     | 6224                |
| Name        | OJ990415_10.9819.C8.o1.np   | Method  | AAT/NAP             |
| Start       | 5017  | End     | 6224                |
| GI          | 6539248   | Score   | 267                 |
| Exons       | 5017..5161, 5402..5626, 5727..6224  |         |                     |
| GI Descrip. | (AC011765) putative lipase/acylhydrolase [Arabidopsis thaliana]   |         |                     |
|             |   |         |                     |
| Seq. No.    | 21715   | Seq. ID | OJ990415_10.9819.C8 |
| Gene No.    | 45301   | Strand  | +                   |
| Start       | 1118  | End     | 6224                |
| Name        | OJ990415_10.9819.C8.o1.gp   | Method  | AAT/GAP             |
| Start       | 5017  | End     | 5069                |
| GI          | 13677_1.R1084   | Score   | 83                  |
| Exons       | 5017..5069  |         |                     |
| GI Descrip. | '4914384/gb AAD32919.1 AC007167_1 5.0e-15 (AC007167) putative APG protein [Arabidopsis thaliana]'                   |         |                     |
|             |   |         |                     |
| Seq. No.    | 21715   | Seq. ID | OJ990415_10.9819.C8 |
| Gene No.    | 45301   | Strand  | +                   |
| Start       | 1118  | End     | 6224                |
| Name        | OJ990415_10.9819.C8.o2.gp   | Method  | AAT/GAP             |
| Start       | 5506  | End     | 5828                |
| GI          | LIB3434-045-P1-K1-H11   | Score   | 319                 |
| Exons       | 5506..5624, 5725..5828  |         |                     |
| GI Descrip. | '2062705/gb U90552 HSU90552 3.0e-10 Human butyrophilin (BTF5) mRNA, complete cds'                                   |         |                     |
|             |   |         |                     |
| Seq. No.    | 21715   | Seq. ID | OJ990415_10.9819.C8 |
| Gene No.    | 45302   | Strand  | +                   |
| Start       | 16224   | End     | 16534               |
| Name        | OJ990415_10.9819.C8.o3.gp   | Method  | AAT/GAP             |
| Start       | 16224   | End     | 16534               |
| GI          | 72524_1.R1084   | Score   | 410                 |
| Exons       | 16224..16534  |         |                     |
| GI Descrip. | '5091496/dbj AB023482.2 AB023482 3.0e-84 Oryza sativa genomic DNA, chromosome 6, clone P0680A03, complete sequence' |         |                     |
|             |   |         |                     |
| Seq. No.    | 21715   | Seq. ID | OJ990415_10.9819.C8 |
| Gene No.    | 45303   | Strand  | -                   |
| Start       | 6782  | End     | 13248               |
| Name        | OJ990415_10.9819.C8.o2.gs   | Method  | GENSCAN             |
| Start       | 6782  | End     | 13248               |
| GI          | none  | Score   | .61                 |
| Exons       | 6782..7311, 7875..7996, 9557..9723, 9868..10150, 10310..12675, 13030..13248   |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21715  | Seq. ID | OJ990415_10.9819.C8 |
| Gene No.    | 45303  | Strand  | -                   |
| Start       | 6782   | End     | 13248               |
| Name        | OJ990415_10.9819.C8.o2.np                    | Method  | AAT/NAP             |
| Start       | 11872  | End     | 12384               |
| GI          | 5305469                                      | Score   | 886                 |
| Exons       | 11872..12384                                 |         |                     |
| GI Descrip. | (AF074894) resistance protein [Oryza sativa] |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 21715                              | Seq. ID | OJ990415_10.9819.C8 |
| Gene No. | 45304                              | Strand  | -                   |
| Start    | 15298                              | End     | 16600               |
| Name     | OJ990415_10.9819.C8.o1.tm          | Method  | TBLASTX:Maize       |
| Start    | 5719                               | End     | 6188                |
| GI       | none                               | Score   | 76                  |
| Exons    | 5719..5823, 5905..6186, 5919..6188 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 21715                              | Seq. ID | OJ990415_10.9819.C8 |
| Gene No. | 45304                              | Strand  | -                   |
| Start    | 15298                              | End     | 16600               |
| Name     | OJ990415_10.9819.C8.o2.ts          | Method  | TBLASTX:Soybean     |
| Start    | 5719                               | End     | 6123                |
| GI       | none                               | Score   | 92                  |
| Exons    | 5719..5808, 5727..5792, 5815..6123 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21715  | Seq. ID | OJ990415_10.9819.C8 |
| Gene No. | 45304  | Strand  | -                   |
| Start    | 15298  | End     | 16600               |
| Name     | OJ990415_10.9819.C8.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 10930  | End     | 11910               |
| GI       | none   | Score   | 42                  |
| Exons    | 10930..11064, 11083..11250, 11410..11526, 11632..11910, 11687..11737, 11792..11908 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21715  | Seq. ID | OJ990415_10.9819.C8 |
| Gene No. | 45304  | Strand  | -                   |
| Start    | 15298  | End     | 16600               |
| Name     | OJ990415_10.9819.C8.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 11065  | End     | 12406               |
| GI       | none   | Score   | 68                  |
| Exons    | 11065..11196, 11635..11760, 11806..11940, 11807..11926, 11959..12030, 12046..12132, 12139..12204, 12289..12405, 12359..12406 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21715                                    | Seq. ID | OJ990415_10.9819.C8 |
| Gene No. | 45304                                    | Strand  | -                   |
| Start    | 15298                                    | End     | 16600               |
| Name     | OJ990415_10.9819.C8.o2.tm                | Method  | TBLASTX:Maize       |
| Start    | 11479                                    | End     | 12018               |
| GI       | none                                     | Score   | 70                  |
| Exons    | 11479..11523, 11542..12018, 11798..11917 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21715                     | Seq. ID | OJ990415_10.9819.C8 |
| Gene No. | 45304                     | Strand  | -                   |
| Start    | 15298                     | End     | 16600               |
| Name     | OJ990415_10.9819.C8.o3.gs | Method  | GENSCAN             |
| Start    | 15298                     | End     | 16143               |

GI none Score .79  
 Exons 15298..15623, 15638..15910, 15961..16143

Seq. No. 21715 Seq. ID OJ990415\_10.9819.C8  
 Gene No. 45304 Strand -  
 Start 15298 End 16600  
 Name OJ990415\_10.9819.C8.o3.np Method AAT/NAP  
 Start 15386 End 16600  
 GI 5823020 Score 101  
 Exons 15386..15792, 16479..16600  
 GI Descrip. (AF089849) senescence-specific cysteine protease [Brassica napus]

Seq. No. 21716 Seq. ID OJ990415\_10.9819.C9  
 Gene No. 45305 Strand +  
 Start 83 End 152  
 Name OJ990415\_10.9819.C9.o1.gp Method AAT/GAP  
 Start 83 End 152  
 GI 5816518 Score 87  
 Exons 83..152  
 GI Descrip. 4521193/dbj|AB013450.1|AB013450 3.0e-40 Oryza sativa DNA, similar sequence to Pib gene

Seq. No. 21716 Seq. ID OJ990415\_10.9819.C9  
 Gene No. 45306 Strand +  
 Start 1848 End 1992  
 Name OJ990415\_10.9819.C9.o1.gs Method GENSCAN  
 Start 1848 End 1992  
 GI none Score .45  
 Exons 1848..1977, 1982..1992

Seq. No. 21716 Seq. ID OJ990415\_10.9819.C9  
 Gene No. 45307 Strand +  
 Start 8952 End 9018  
 Name OJ990415\_10.9819.C9.o3.gp Method AAT/GAP  
 Start 8952 End 9018  
 GI uC-osroM202024h08a1 Score 95  
 Exons 8952..9018  
 GI Descrip. '5852170/emb|AL117265.1|OST17804 5.0e-84 Oryza sativa indica (GLA4) genomic DNA, chromosome 4, BAC clone:tl7804'

Seq. No. 21716 Seq. ID OJ990415\_10.9819.C9  
 Gene No. 45308 Strand -  
 Start 1355 End 10093  
 Name OJ990415\_10.9819.C9.o1.np Method AAT/NAP  
 Start 1355 End 10005  
 GI 5091513 Score 1465  
 Exons 1355..1426, 1474..1887, 1940..2066, 2758..3703, 4459..5017, 9365..9528, 9820..10005  
 GI Descrip. (AB023482) Hypothetical protein [Oryza sativa]

Seq. No. 21716 Seq. ID OJ990415\_10.9819.C9  
 Gene No. 45308 Strand -  
 Start 1355 End 10093  
 Name OJ990415\_10.9819.C9.o2.gs Method GENSCAN  
 Start 2787 End 10093  
 GI none Score .58



Exons 2787..3729, 4521..4896, 5081..5207, 6501..6622, 9342..9585, 9950..10093

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21717  | Seq. ID | OJ990415_10.9819.C10 |
| Gene No. | 45309  | Strand  | -                    |
| Start    | 1188   | End     | 2894                 |
| Name     | OJ990415_10.9819.C10.o1.gs                                 | Method  | GENSCAN              |
| Start    | 1188   | End     | 2894                 |
| GI       | none   | Score   | .52                  |
| Exons    | 1188..1314, 1359..1449, 1542..1664, 1936..2099, 2803..2894 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21718   | Seq. ID | OJ990415_10.9819.C11 |
| Gene No.    | 45310   | Strand  | -                    |
| Start       | 1   | End     | 747                  |
| Name        | OJ990415_10.9819.C11.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 747                  |
| GI          | 136140  | Score   | 272                  |
| Exons       | 1..747  |         |                      |
| GI Descrip. | PUTATIVE AC9 TRANSPOSASE gi 72973 pir  TQZMCA probable transposase - maize transposon Ac9 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21718                      | Seq. ID | OJ990415_10.9819.C11 |
| Gene No. | 45310                      | Strand  | -                    |
| Start    | 1                          | End     | 747                  |
| Name     | OJ990415_10.9819.C11.o1.gs | Method  | GENSCAN              |
| Start    | 354                        | End     | 592                  |
| GI       | none                       | Score   | .45                  |
| Exons    | 354..494, 578..592         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21719                      | Seq. ID | OJ990415_10.9819.C12 |
| Gene No. | 45311                      | Strand  | -                    |
| Start    | 432                        | End     | 514                  |
| Name     | OJ990415_10.9819.C12.o1.gs | Method  | GENSCAN              |
| Start    | 432                        | End     | 514                  |
| GI       | none                       | Score   | .83                  |
| Exons    | 432..514                   |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21720                        | Seq. ID | OJ990415_10.9819.C18 |
| Gene No. | 45312                        | Strand  | +                    |
| Start    | 123                          | End     | 869                  |
| Name     | OJ990415_10.9819.C18.o1.gs   | Method  | GENSCAN              |
| Start    | 123                          | End     | 869                  |
| GI       | none                         | Score   | .66                  |
| Exons    | 123..258, 440..540, 720..869 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21721                      | Seq. ID | OJ990415_10.9819.C19 |
| Gene No. | 45313                      | Strand  | -                    |
| Start    | 235                        | End     | 537                  |
| Name     | OJ990415_10.9819.C19.o1.gs | Method  | GENSCAN              |
| Start    | 235                        | End     | 537                  |
| GI       | none                       | Score   | .98                  |
| Exons    | 235..537                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21722                      | Seq. ID | OJ990415_10.9819.C20 |
| Gene No. | 45314                      | Strand  | +                    |
| Start    | 1                          | End     | 875                  |
| Name     | OJ990415_10.9819.C20.o1.np | Method  | AAT/NAP              |

Start 1 End 875  
 GI 5902445 Score 607  
 Exons 1..875  
 GI Descrip. (AB030283) GAG-POL precursor [Oryza sativa]

Seq. No. 21722 Seq. ID OJ990415\_10.9819.C20  
 Gene No. 45314 Strand +  
 Start 1 End 875  
 Name OJ990415\_10.9819.C20.o1.tm Method TBLASTX:Maize  
 Start 129 End 563  
 GI none Score 286  
 Exons 129..563, 272..541

Seq. No. 21722 Seq. ID OJ990415\_10.9819.C20  
 Gene No. 45314 Strand +  
 Start 1 End 875  
 Name OJ990415\_10.9819.C20.o1.gs Method GENSCAN  
 Start 144 End 517  
 GI none Score .58  
 Exons 144..356, 398..517

Seq. No. 21722 Seq. ID OJ990415\_10.9819.C20  
 Gene No. 45314 Strand +  
 Start 1 End 875  
 Name OJ990415\_10.9819.C20.o1.ts Method TBLASTX:Soybean  
 Start 207 End 443  
 GI none Score 186  
 Exons 207..443, 287..433

Seq. No. 21722 Seq. ID OJ990415\_10.9819.C20  
 Gene No. 45314 Strand +  
 Start 1 End 875  
 Name OJ990415\_10.9819.C20.o1.tw Method TBLASTX:Wheat  
 Start 231 End 654  
 GI none Score 314  
 Exons 231..560, 271..372, 278..544, 537..650, 538..654

Seq. No. 21723 Seq. ID OJ990415\_10.9819.C21  
 Gene No. 45315 Strand -  
 Start 141 End 1350  
 Name OJ990415\_10.9819.C21.o1.np Method AAT/NAP  
 Start 141 End 1350  
 GI 4680183 Score 179  
 Exons 141..232, 844..949, 1068..1350  
 GI Descrip. (AF111709) gag-pol protein [Oryza sativa subsp. indica]

Seq. No. 21724 Seq. ID OJ990415\_10.9819.C22  
 Gene No. 45316 Strand +  
 Start 38 End 163  
 Name OJ990415\_10.9819.C22.o1.gp Method AAT/GAP  
 Start 38 End 163  
 GI LIB3474-009-P1-K1-F11 Score 166  
 Exons 38..163  
 GI Descrip. '4455244/emb|CAB36743.1| 6.0e-11 (AL035523) MtN3-like protein [Arabidopsis thaliana]'

Seq. No. 21724 Seq. ID OJ990415\_10.9819.C22

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Gene No.    | 45317   | Strand  | +                    |
| Start       | 849   | End     | 1930                 |
| Name        | OJ990415_10.9819.C22.ol.gs  | Method  | GENSCAN              |
| Start       | 849   | End     | 1930                 |
| GI          | none  | Score   | .63                  |
| Exons       | 849..887, 1037..1144, 1901..1930  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21725   | Seq. ID | OJ990415_10.9819.C25 |
| Gene No.    | 45318   | Strand  | -                    |
| Start       | 148   | End     | 254                  |
| Name        | OJ990415_10.9819.C25.ol.gs  | Method  | GENSCAN              |
| Start       | 148   | End     | 254                  |
| GI          | none  | Score   | .88                  |
| Exons       | 148..254  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21726   | Seq. ID | OJ990415_10.9819.C27 |
| Gene No.    | 45319   | Strand  | +                    |
| Start       | 225   | End     | 402                  |
| Name        | OJ990415_10.9819.C27.ol.gs  | Method  | GENSCAN              |
| Start       | 225   | End     | 402                  |
| GI          | none  | Score   | .99                  |
| Exons       | 225..402  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21727   | Seq. ID | OJ990415_10.9819.C29 |
| Gene No.    | 45320   | Strand  | +                    |
| Start       | 232   | End     | 475                  |
| Name        | OJ990415_10.9819.C29.ol.gs  | Method  | GENSCAN              |
| Start       | 232   | End     | 475                  |
| GI          | none  | Score   | .64                  |
| Exons       | 232..475  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21727   | Seq. ID | OJ990415_10.9819.C29 |
| Gene No.    | 45321   | Strand  | -                    |
| Start       | 255   | End     | 798                  |
| Name        | OJ990415_10.9819.C29.ol.np  | Method  | AAT/NAP              |
| Start       | 255   | End     | 798                  |
| GI          | 5852180   | Score   | 271                  |
| Exons       | 255..629, 676..798  |         |                      |
| GI Descrip. | (AL117265) zhb00010.1 [Oryza sativa]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21728   | Seq. ID | OJ990415_10.9819.C30 |
| Gene No.    | 45322   | Strand  | -                    |
| Start       | 1   | End     | 5847                 |
| Name        | OJ990415_10.9819.C30.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 5847                 |
| GI          | 5725435   | Score   | 142                  |
| Exons       | 1..59, 1312..1428, 1546..1665, 2071..2231, 2447..2518, 2639..2743, 2862..2928, 2963..3109, 5741..5847 |         |                      |
| GI Descrip. | (AL109787) putative protein [Arabidopsis thaliana]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21728   | Seq. ID | OJ990415_10.9819.C30 |
| Gene No.    | 45322   | Strand  | -                    |
| Start       | 1   | End     | 5847                 |
| Name        | OJ990415_10.9819.C30.ol.gp  | Method  | AAT/GAP              |
| Start       | 555   | End     | 687                  |
| GI          | LIB3474-009-P1-K1-F11   | Score   | 228                  |
| Exons       | 555..687  |         |                      |

GI Descrip. '4455244/emb|CAB36743.1| 6.0e-11 (AL035523) MtN3-like protein [Arabidopsis thaliana]'

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21728  | Seq. ID | OJ990415_10.9819.C30 |
| Gene No.    | 45322  | Strand  | -                    |
| Start       | 1  | End     | 5847                 |
| Name        | OJ990415_10.9819.C30.o2.np   | Method  | AAT/NAP              |
| Start       | 4294   | End     | 4514                 |
| GI          | 6714341  | Score   | 143                  |
| Exons       | 4294..4514   |         |                      |
| GI Descrip. | (AC016162) putative GDSL-motif lipase/acylhydrolase [Arabidopsis thaliana] |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21729                              | Seq. ID | OJ990415_10.9819.C31 |
| Gene No. | 45323                              | Strand  | +                    |
| Start    | 4138                               | End     | 5948                 |
| Name     | OJ990415_10.9819.C31.o2.gs         | Method  | GENSCAN              |
| Start    | 4138                               | End     | 5948                 |
| GI       | none                               | Score   | .63                  |
| Exons    | 4138..4244, 4309..4436, 5746..5948 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21729                      | Seq. ID | OJ990415_10.9819.C31 |
| Gene No. | 45324                      | Strand  | +                    |
| Start    | 17441                      | End     | 20650                |
| Name     | OJ990415_10.9819.C31.o1.gp | Method  | AAT/GAP              |
| Start    | 17441                      | End     | 20583                |
| GI       | none                       | Score   | 1416                 |
| Exons    | 17441..17948, 20354..20583 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21729                      | Seq. ID | OJ990415_10.9819.C31 |
| Gene No. | 45324                      | Strand  | +                    |
| Start    | 17441                      | End     | 20650                |
| Name     | OJ990415_10.9819.C31.o6.gs | Method  | GENSCAN              |
| Start    | 20348                      | End     | 20650                |
| GI       | none                       | Score   | .71                  |
| Exons    | 20348..20650               |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21729  | Seq. ID | OJ990415_10.9819.C31 |
| Gene No.    | 45325  | Strand  | +                    |
| Start       | 25397  | End     | 27112                |
| Name        | OJ990415_10.9819.C31.o4.np   | Method  | AAT/NAP              |
| Start       | 25397  | End     | 27112                |
| GI          | 6907087  | Score   | 908                  |
| Exons       | 25397..25765, 25811..26470, 27011..27112   |         |                      |
| GI Descrip. | (AP001129) ESTs C72771(E2215),AU082313(E2215) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21729  | Seq. ID | OJ990415_10.9819.C31 |
| Gene No.    | 45326  | Strand  | +                    |
| Start       | 27572  | End     | 27951                |
| Name        | OJ990415_10.9819.C31.o2.gp   | Method  | AAT/GAP              |
| Start       | 27572  | End     | 27951                |
| GI          | uC-osflcyp033a04b1   | Score   | 633                  |
| Exons       | 27572..27951   |         |                      |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21729  | Seq. ID | OJ990415_10.9819.C31 |
| Gene No.    | 45327  | Strand  | +                    |
| Start       | 31541  | End     | 31819                |
| Name        | OJ990415_10.9819.C31.o3.gp   | Method  | AAT/GAP              |
| Start       | 31541  | End     | 31819                |
| GI          | 31877_1.R1084  | Score   | 215                  |
| Exons       | 31541..31616, 31751..31819   |         |                      |
| GI Descrip. | '4521193/dbj AB013450.1 AB013450 1.0e-99 Oryza sativa DNA, similar sequence to Pib gene' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21729                                    | Seq. ID | OJ990415_10.9819.C31 |
| Gene No. | 45328                                    | Strand  | +                    |
| Start    | 33082                                    | End     | 34159                |
| Name     | OJ990415_10.9819.C31.o8.gs               | Method  | GENSCAN              |
| Start    | 33082                                    | End     | 34159                |
| GI       | none                                     | Score   | .49                  |
| Exons    | 33082..33221, 33273..33594, 33995..34159 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21729                                       | Seq. ID | OJ990415_10.9819.C31 |
| Gene No. | 45329                                       | Strand  | -                    |
| Start    | 222   | End     | 2270                 |
| Name     | OJ990415_10.9819.C31.o1.gs                  | Method  | GENSCAN              |
| Start    | 222   | End     | 1888                 |
| GI       | none  | Score   | .71                  |
| Exons    | 222..530, 851..1081, 1206..1324, 1606..1888 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21729  | Seq. ID | OJ990415_10.9819.C31 |
| Gene No.    | 45329  | Strand  | -                    |
| Start       | 222  | End     | 2270                 |
| Name        | OJ990415_10.9819.C31.o1.np   | Method  | AAT/NAP              |
| Start       | 311  | End     | 2270                 |
| GI          | 4914384  | Score   | 178                  |
| Exons       | 311..604, 931..1081, 1200..1317, 1599..1812, 2186..2270                |         |                      |
| GI Descrip. | (AC007167) putative GDSL-motif lipase/hydrolase [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21729  | Seq. ID | OJ990415_10.9819.C31 |
| Gene No. | 45330  | Strand  | -                    |
| Start    | 7027   | End     | 12663                |
| Name     | OJ990415_10.9819.C31.o3.gs   | Method  | GENSCAN              |
| Start    | 7027   | End     | 12663                |
| GI       | none   | Score   | .6                   |
| Exons    | 7027..7194, 8259..8306, 8737..8811, 9371..9600, 12319..12447, 12585..12663 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21729  | Seq. ID | OJ990415_10.9819.C31 |
| Gene No.    | 45330  | Strand  | -                    |
| Start       | 7027   | End     | 12663                |
| Name        | OJ990415_10.9819.C31.o2.np                               | Method  | AAT/NAP              |
| Start       | 8472   | End     | 10780                |
| GI          | 1091678  | Score   | 1252                 |
| Exons       | 8472..8531, 8828..10780                                  |         |                      |
| GI Descrip. | activator-like transposable element [Pennisetum glaucum] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21729 | Seq. ID | OJ990415_10.9819.C31 |
| Gene No. | 45331 | Strand  | -                    |

|       |                            |        |         |
|-------|----------------------------|--------|---------|
| Start | 18844                      | End    | 19896   |
| Name  | OJ990415_10.9819.C31.o5.gs | Method | GENSCAN |
| Start | 18844                      | End    | 19896   |
| GI    | none                       | Score  | .75     |
| Exons | 18844..19373, 19605..19896 |        |         |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21729   | Seq. ID | OJ990415_10.9819.C31 |
| Gene No.    | 45332   | Strand  | -                    |
| Start       | 27505   | End     | 29449                |
| Name        | OJ990415_10.9819.C31.o5.np                      | Method  | AAT/NAP              |
| Start       | 27505   | End     | 29449                |
| GI          | 4680186   | Score   | 309                  |
| Exons       | 27505..27705, 29403..29449                      |         |                      |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21729  | Seq. ID | OJ990415_10.9819.C31 |
| Gene No.    | 45333  | Strand  | -                    |
| Start       | 30839  | End     | 32828                |
| Name        | OJ990415_10.9819.C31.o7.np                     | Method  | AAT/NAP              |
| Start       | 30839  | End     | 32828                |
| GI          | 6539570  | Score   | 181                  |
| Exons       | 30839..30864, 32359..32422, 32625..32828       |         |                      |
| GI Descrip. | (AP000836) hypothetical protein [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21729   | Seq. ID | OJ990415_10.9819.C31 |
| Gene No. | 45334   | Strand  | -                    |
| Start    | 32957   | End     | 33035                |
| Name     | OJ990415_10.9819.C31.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 8889  | End     | 10337                |
| GI       | none  | Score   | 154                  |
| Exons    | 8889..8966, 8979..9047, 9060..9122, 9110..9163, 9383..9604, 9384..9608, 9385..9609, 9619..9765, 9762..9896, 9770..9976, 9783..9977, 9981..10022, 10029..10172, 10075..10173, 10163..10276, 10166..10276, 10278..10337 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21729                                    | Seq. ID | OJ990415_10.9819.C31 |
| Gene No. | 45334                                    | Strand  | -                    |
| Start    | 32957                                    | End     | 33035                |
| Name     | OJ990415_10.9819.C31.o2.tm               | Method  | TBLASTX:Maize        |
| Start    | 10338                                    | End     | 10543                |
| GI       | none                                     | Score   | 141                  |
| Exons    | 10338..10514, 10343..10543, 10346..10525 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21729   | Seq. ID | OJ990415_10.9819.C31 |
| Gene No.    | 45334   | Strand  | -                    |
| Start       | 32957   | End     | 33035                |
| Name        | OJ990415_10.9819.C31.o8.np  | Method  | AAT/NAP              |
| Start       | 32957   | End     | 33035                |
| GI          | 6630699   | Score   | 75                   |
| Exons       | 32957..33035  |         |                      |
| GI Descrip. | (AP000969) hypothetical protein [Oryza sativa]<br>gi 6721536 dbj BAA89566.1  (AP001073) hypothetical protein [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21730 | Seq. ID | OJ990415_10.9819.C32 |
| Gene No. | 45335 | Strand  | +                    |
| Start    | 188   | End     | 531                  |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990415_10.9819.C32.o1.gs   | Method  | GENSCAN              |
| Start       | 188  | End     | 531                  |
| GI          | none   | Score   | .64                  |
| Exons       | 188..396, 417..531   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21730  | Seq. ID | OJ990415_10.9819.C32 |
| Gene No.    | 45336  | Strand  | -                    |
| Start       | 1  | End     | 540                  |
| Name        | OJ990415_10.9819.C32.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 540                  |
| GI          | 6539570  | Score   | 183                  |
| Exons       | 1..122, 325..540   |         |                      |
| GI Descrip. | (AP000836) hypothetical protein [Oryza sativa]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21731  | Seq. ID | OJ990415_10.9819.C33 |
| Gene No.    | 45337  | Strand  | +                    |
| Start       | 123  | End     | 201                  |
| Name        | OJ990415_10.9819.C33.o1.gs   | Method  | GENSCAN              |
| Start       | 123  | End     | 201                  |
| GI          | none   | Score   | .75                  |
| Exons       | 123..201   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21732  | Seq. ID | OJ990415_10.9819.C35 |
| Gene No.    | 45338  | Strand  | +                    |
| Start       | 94   | End     | 298                  |
| Name        | OJ990415_10.9819.C35.o1.gs   | Method  | GENSCAN              |
| Start       | 94   | End     | 298                  |
| GI          | none   | Score   | .83                  |
| Exons       | 94..298  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21733  | Seq. ID | OJ990415_10.9819.C37 |
| Gene No.    | 45339  | Strand  | +                    |
| Start       | 1  | End     | 794                  |
| Name        | OJ990415_10.9819.C37.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 794                  |
| GI          | 1091678  | Score   | 685                  |
| Exons       | 1..794   |         |                      |
| GI Descrip. | activator-like transposable element [Pennisetum glaucum]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21733  | Seq. ID | OJ990415_10.9819.C37 |
| Gene No.    | 45339  | Strand  | +                    |
| Start       | 1  | End     | 794                  |
| Name        | OJ990415_10.9819.C37.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 200  | End     | 793                  |
| GI          | none   | Score   | 349                  |
| Exons       | 200..511, 205..507, 209..517, 270..518, 509..616, 517..642, 522..641, 652..699, 652..699, 706..783, 707..793 |         |                      |
|             |  |         |                      |
| Seq. No.    | 21734  | Seq. ID | OJ990415_10.9819.C38 |
| Gene No.    | 45340  | Strand  | -                    |
| Start       | 106  | End     | 355                  |
| Name        | OJ990415_10.9819.C38.o1.gs   | Method  | GENSCAN              |
| Start       | 106  | End     | 355                  |
| GI          | none   | Score   | .68                  |
| Exons       | 106..355   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21735  | Seq. ID | OJ990405_12.9819.C1  |

Gene No. 45341  
 Start 389  
 Name OJ990405\_12.9819.C1.o1.gs  
 Start 389  
 GI none  
 Exons 389..634

Strand -  
 End 649  
 Method GENSCAN  
 End 634  
 Score .87

Seq. No. 21735  
 Gene No. 45341  
 Start 389  
 Name OJ990405\_12.9819.C1.o1.tm  
 Start 466  
 GI none  
 Exons 466..636, 467..649, 471..638

Seq. ID OJ990405\_12.9819.C1  
 Strand -  
 End 649  
 Method TBLASTX:Maize  
 End 649  
 Score 169

Seq. No. 21736  
 Gene No. 45342  
 Start 418  
 Name OJ990405\_12.9819.C2.o1.gs  
 Start 418  
 GI none  
 Exons 418..736, 930..1063

Seq. ID OJ990405\_12.9819.C2  
 Strand +  
 End 1063  
 Method GENSCAN  
 End 1063  
 Score .62

Seq. No. 21736  
 Gene No. 45343  
 Start 6370  
 Name OJ990405\_12.9819.C2.o3.gs  
 Start 6370  
 GI none  
 Exons 6370..6407, 7045..7234, 7553..7570

Seq. ID OJ990405\_12.9819.C2  
 Strand +  
 End 7570  
 Method GENSCAN  
 End 7570  
 Score .9

Seq. No. 21736  
 Gene No. 45344  
 Start 8387  
 Name OJ990405\_12.9819.C2.o1.gp  
 Start 8387  
 GI 45206\_1.R1084  
 Exons 8387..8991

Seq. ID OJ990405\_12.9819.C2  
 Strand +  
 End 8991  
 Method AAT/GAP  
 End 8991  
 Score 1142

GI Descrip. '4469024/emb|CAB38285| 3.0e-30 (AL035602) putative protein [Arabidopsis thaliana]'

Seq. No. 21736  
 Gene No. 45345  
 Start 2663  
 Name OJ990405\_12.9819.C2.o2.gs  
 Start 2663  
 GI none  
 Exons 2663..2909, 2953..3140, 3546..3626, 3799..3861

Seq. ID OJ990405\_12.9819.C2  
 Strand -  
 End 3861  
 Method GENSCAN  
 End 3861  
 Score .78

Seq. No. 21736  
 Gene No. 45346  
 Start 8970  
 Name OJ990405\_12.9819.C2.o4.gs  
 Start 8970  
 GI none  
 Exons 8970..9287, 9387..9533, 9635..9790

Seq. ID OJ990405\_12.9819.C2  
 Strand -  
 End 9935  
 Method GENSCAN  
 End 9790  
 Score .57

22026



|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21736                     | Seq. ID | OJ990405_12.9819.C2 |
| Gene No. | 45346                     | Strand  | -                   |
| Start    | 8970                      | End     | 9935                |
| Name     | OJ990405_12.9819.C2.o2.gp | Method  | AAT/GAP             |
| Start    | 9042                      | End     | 9303                |
| GI       | none                      | Score   | 392                 |
| Exons    | 9042..9303                |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21736  | Seq. ID | OJ990405_12.9819.C2 |
| Gene No.    | 45346  | Strand  | -                   |
| Start       | 8970   | End     | 9935                |
| Name        | OJ990405_12.9819.C2.o1.np                      | Method  | AAT/NAP             |
| Start       | 9096   | End     | 9935                |
| GI          | 6624711  | Score   | 231                 |
| Exons       | 9096..9167, 9225..9287, 9387..9533, 9635..9935 |         |                     |
| GI Descrip. | (AJ243961) hypothetical protein [Oryza sativa] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21736  | Seq. ID | OJ990405_12.9819.C2 |
| Gene No. | 45346  | Strand  | -                   |
| Start    | 8970   | End     | 9935                |
| Name     | OJ990405_12.9819.C2.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 9195   | End     | 9889                |
| GI       | none   | Score   | 88                  |
| Exons    | 9195..9290, 9229..9291, 9387..9545, 9393..9536, 9632..9826, 9743..9826, 9818..9889, 9829..9888 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21736  | Seq. ID | OJ990405_12.9819.C2 |
| Gene No. | 45346  | Strand  | -                   |
| Start    | 8970   | End     | 9935                |
| Name     | OJ990405_12.9819.C2.o1.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 9231   | End     | 9888                |
| GI       | none   | Score   | 43                  |
| Exons    | 9231..9293, 9384..9545, 9632..9826, 9829..9888 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21737                     | Seq. ID | OJ990405_12.9819.C3 |
| Gene No. | 45347                     | Strand  | +                   |
| Start    | 250                       | End     | 539                 |
| Name     | OJ990405_12.9819.C3.o1.gs | Method  | GENSCAN             |
| Start    | 250                       | End     | 539                 |
| GI       | none                      | Score   | .95                 |
| Exons    | 250..539                  |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21737   | Seq. ID | OJ990405_12.9819.C3 |
| Gene No.    | 45348   | Strand  | +                   |
| Start       | 2901  | End     | 7572                |
| Name        | OJ990405_12.9819.C3.o1.np   | Method  | AAT/NAP             |
| Start       | 2901  | End     | 7572                |
| GI          | 6069646   | Score   | 302                 |
| Exons       | 2901..2975, 7259..7572  |         |                     |
| GI Descrip. | (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi 6907112 dbj BAA90639.1  (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 21737 | Seq. ID | OJ990405_12.9819.C3 |
| Gene No. | 45348 | Strand  | +                   |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 2901   | End    | 7572    |
| Name        | OJ990405_12.9819.C3.o2.gp  | Method | AAT/GAP |
| Start       | 4766   | End    | 4993    |
| GI          | 6547_1.R1084   | Score  | 332     |
| Exons       | 4766..4993   |        |         |
| GI Descrip. | '5257255/dbj AP000364.1 AP000364 4.0e-52 Oryza sativa genomic DNA, chromosome 8, clone:P0026F07' |        |         |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21737                     | Seq. ID | OJ990405_12.9819.C3 |
| Gene No. | 45349                     | Strand  | +                   |
| Start    | 8108                      | End     | 8708                |
| Name     | OJ990405_12.9819.C3.o3.gs | Method  | GENSCAN             |
| Start    | 8108                      | End     | 8708                |
| GI       | none                      | Score   | .99                 |
| Exons    | 8108..8212, 8304..8708    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21737                     | Seq. ID | OJ990405_12.9819.C3 |
| Gene No. | 45350                     | Strand  | -                   |
| Start    | 114                       | End     | 482                 |
| Name     | OJ990405_12.9819.C3.o1.gp | Method  | AAT/GAP             |
| Start    | 114                       | End     | 482                 |
| GI       | none                      | Score   | 730                 |
| Exons    | 114..482                  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21737  | Seq. ID | OJ990405_12.9819.C3 |
| Gene No. | 45351  | Strand  | -                   |
| Start    | 1325   | End     | 7611                |
| Name     | OJ990405_12.9819.C3.o2.gs  | Method  | GENSCAN             |
| Start    | 1325   | End     | 7611                |
| GI       | none   | Score   | .49                 |
| Exons    | 1325..1489, 3631..3671, 3707..3785, 4893..5000, 7368..7508, 7597..7611 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21737                     | Seq. ID | OJ990405_12.9819.C3 |
| Gene No. | 45352                     | Strand  | -                   |
| Start    | 9357                      | End     | 10211               |
| Name     | OJ990405_12.9819.C3.o4.gs | Method  | GENSCAN             |
| Start    | 9357                      | End     | 10211               |
| GI       | none                      | Score   | .57                 |
| Exons    | 9357..9487, 10148..10211  |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21738                     | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45353                     | Strand  | +                   |
| Start    | 3424                      | End     | 6886                |
| Name     | OJ990405_12.9819.C4.o1.gp | Method  | AAT/GAP             |
| Start    | 3331                      | End     | 3654                |
| GI       | none                      | Score   | 636                 |
| Exons    | 3331..3654                |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21738   | Seq. ID | OJ990405_12.9819.C4 |
| Gene No.    | 45353   | Strand  | +                   |
| Start       | 3424  | End     | 6886                |
| Name        | OJ990405_12.9819.C4.o1.np                                 | Method  | AAT/NAP             |
| Start       | 3421  | End     | 6886                |
| GI          | 4567279   | Score   | 2504                |
| Exons       | 3421..5901, 6774..6886                                    |         |                     |
| GI Descrip. | (AC006841) putative protein kinase [Arabidopsis thaliana] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No.    | 45353  | Strand  | +                   |
| Start       | 3424   | End     | 6886                |
| Name        | OJ990405_12.9819.C4.o2.gs  | Method  | GENSCAN             |
| Start       | 3424   | End     | 6157                |
| GI          | none   | Score   | .98                 |
| Exons       | 3424..5957, 5986..6157   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No.    | 45353  | Strand  | +                   |
| Start       | 3424   | End     | 6886                |
| Name        | OJ990405_12.9819.C4.o2.gp  | Method  | AAT/GAP             |
| Start       | 5145   | End     | 5581                |
| GI          | 16916_1.R1084  | Score   | 778                 |
| Exons       | 5145..5581   |         |                     |
| GI Descrip. | '4567279/gb AAD23692.1 AC006841_20 1.0e-60 (AC006841) putative serine/threonine protein kinase [Arabidopsis thaliana]' |         |                     |
|             |  |         |                     |
| Seq. No.    | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No.    | 45354  | Strand  | +                   |
| Start       | 8428   | End     | 13540               |
| Name        | OJ990405_12.9819.C4.o3.gs  | Method  | GENSCAN             |
| Start       | 8428   | End     | 13047               |
| GI          | none   | Score   | .74                 |
| Exons       | 8428..8682, 9813..10568, 11152..11200, 11851..12065, 12706..12806, 12954..13047  |         |                     |
|             |  |         |                     |
| Seq. No.    | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No.    | 45354  | Strand  | +                   |
| Start       | 8428   | End     | 13540               |
| Name        | OJ990405_12.9819.C4.o3.gp  | Method  | AAT/GAP             |
| Start       | 8583   | End     | 10109               |
| GI          | none   | Score   | 835                 |
| Exons       | 8583..8739, 9813..10109  |         |                     |
|             |  |         |                     |
| Seq. No.    | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No.    | 45354  | Strand  | +                   |
| Start       | 8428   | End     | 13540               |
| Name        | OJ990405_12.9819.C4.o2.np  | Method  | AAT/NAP             |
| Start       | 9927   | End     | 13540               |
| GI          | 2980798  | Score   | 699                 |
| Exons       | 9927..10568, 10654..10782, 11152..11200, 11851..12065, 12173..12241, 12706..12806, 12954..13047, 13264..13540          |         |                     |
| GI Descrip. | (AL022197) putative protein [Arabidopsis thaliana]   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No.    | 45354  | Strand  | +                   |
| Start       | 8428   | End     | 13540               |
| Name        | OJ990405_12.9819.C4.o4.gp  | Method  | AAT/GAP             |
| Start       | 10658  | End     | 13316               |
| GI          | 14682_1.R1084  | Score   | 1256                |
| Exons       | 10658..10782, 11152..11200, 11851..12065, 12173..12241, 12706..12806, 12954..13047, 13264..13316                       |         |                     |
| GI Descrip. | '2980798/emb CAA18174.1  8.0e-78 (AL022197) putative protein [Arabidopsis thaliana]'                                   |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21738                     | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45355                     | Strand  | -                   |
| Start    | 2241                      | End     | 2531                |
| Name     | OJ990405_12.9819.C4.o1.gs | Method  | GENSCAN             |
| Start    | 2241                      | End     | 2531                |
| GI       | none                      | Score   | .41                 |
| Exons    | 2241..2531                |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45356  | Strand  |                     |
| Start    | 4075   | End     | 4845                |
| Name     | OJ990405_12.9819.C4.o3.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 4075   | End     | 4674                |
| GI       | none   | Score   | 73                  |
| Exons    | 4075..4167, 4249..4530, 4260..4526, 4594..4674 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45356  | Strand  |                     |
| Start    | 4075   | End     | 4845                |
| Name     | OJ990405_12.9819.C4.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 4086   | End     | 4602                |
| GI       | none   | Score   | 535                 |
| Exons    | 4086..4505, 4090..4512, 4488..4535, 4489..4548, 4507..4602, 4548..4592 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45356  | Strand  |                     |
| Start    | 4075   | End     | 4845                |
| Name     | OJ990405_12.9819.C4.o2.tc  | Method  | TBLASTX:Cress       |
| Start    | 4446   | End     | 4845                |
| GI       | none   | Score   | 287                 |
| Exons    | 4446..4589, 4447..4695, 4650..4694, 4736..4771, 4776..4841, 4777..4845 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 21738                              | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45357                              | Strand  |                     |
| Start    | 4918                               | End     | 5817                |
| Name     | OJ990405_12.9819.C4.o1.ts          | Method  | TBLASTX:Soybean     |
| Start    | 4918                               | End     | 5805                |
| GI       | none                               | Score   | 1108                |
| Exons    | 4918..5805, 4938..4976, 5019..5798 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45357  | Strand  |                     |
| Start    | 4918   | End     | 5817                |
| Name     | OJ990405_12.9819.C4.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 4936   | End     | 5817                |
| GI       | none   | Score   | 455                 |
| Exons    | 4936..5235, 4938..5234, 5170..5250, 5227..5325, 5245..5817, 5250..5798 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21738                     | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45357                     | Strand  |                     |
| Start    | 4918                      | End     | 5817                |
| Name     | OJ990405_12.9819.C4.o1.tc | Method  | TBLASTX:Cress       |
| Start    | 4945                      | End     | 5498                |
| GI       | none                      | Score   | 117                 |

Exons 4945..5037, 5034..5498, 5035..5487

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 21738                              | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45357                              | Strand  |                     |
| Start    | 4918                               | End     | 5817                |
| Name     | OJ990405_12.9819.C4.o1.tw          | Method  | TBLASTX:Wheat       |
| Start    | 4981                               | End     | 5400                |
| GI       | none                               | Score   | 78                  |
| Exons    | 4981..5037, 5034..5399, 5035..5400 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45357  | Strand  |                     |
| Start    | 4918   | End     | 5817                |
| Name     | OJ990405_12.9819.C4.o2.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 5425   | End     | 5817                |
| GI       | none   | Score   | 149                 |
| Exons    | 5425..5625, 5436..5549, 5646..5789, 5647..5817 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21738                     | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45357                     | Strand  |                     |
| Start    | 4918                      | End     | 5817                |
| Name     | OJ990405_12.9819.C4.o3.tc | Method  | TBLASTX:Cress       |
| Start    | 5499                      | End     | 5805                |
| GI       | none                      | Score   | 323                 |
| Exons    | 5499..5795, 5500..5805    |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 21738   | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45358   | Strand  |                     |
| Start    | 9848  | End     | 10758               |
| Name     | OJ990405_12.9819.C4.o2.tm   | Method  | TBLASTX:Maize       |
| Start    | 9848  | End     | 10758               |
| GI       | none  | Score   | 52                  |
| Exons    | 9848..9883, 9849..9884, 9850..9885, 9891..10211, 9893..10429, 9893..10357, 10213..10458, 10284..10358, 10421..10483, 10484..10573, 10485..10568, 10653..10757, 10653..10757, 10654..10758 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45359  | Strand  |                     |
| Start    | 11152  | End     | 13316               |
| Name     | OJ990405_12.9819.C4.o4.tc  | Method  | TBLASTX:Cress       |
| Start    | 11152  | End     | 12211               |
| GI       | none   | Score   | 67                  |
| Exons    | 11152..11199, 11849..12064, 11850..12077, 11865..12068, 12161..12211 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45359  | Strand  |                     |
| Start    | 11152  | End     | 13316               |
| Name     | OJ990405_12.9819.C4.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 11846  | End     | 13316               |
| GI       | none   | Score   | 200                 |
| Exons    | 11846..12064, 11849..12064, 11850..12068, 11853..12068, 12167..12247, 12172..12243, 12703..12816, 12704..12808, 12714..12815, 12951..12992, 12955..12996, 12999..13046, 13000..13053, 13227..13313, 13237..13314, 13258..13314, 13260..13316 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21738  | Seq. ID | OJ990405_12.9819.C4 |
| Gene No. | 45359  | Strand  |                     |
| Start    | 11152  | End     | 13316               |
| Name     | OJ990405_12.9819.C4.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 11849  | End     | 13302               |
| GI       | none   | Score   | 235                 |
| Exons    | 11849..12064, 11850..12077, 11850..12068, 12158..12229,<br>12161..12247, 12172..12243, 12703..12816, 12951..13046,<br>12958..13053, 13258..13302 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21739  | Seq. ID | OJ990405_12.9819.C7 |
| Gene No.    | 45360  | Strand  | +                   |
| Start       | 415  | End     | 7129                |
| Name        | OJ990405_12.9819.C7.o1.np  | Method  | AAT/NAP             |
| Start       | 415  | End     | 6822                |
| GI          | 5734621  | Score   | 2958                |
| Exons       | 415..554, 642..898, 936..1196, 1610..1712, 1863..1970,<br>2084..2167, 2273..2333, 2744..2889, 3351..3467, 3573..3658,<br>4218..4306, 4966..5021, 5155..5235, 5500..5565, 5693..5785,<br>5886..5950, 6232..6367, 6679..6822 |         |                     |
| GI Descrip. | (AP000391) ESTs AU067992(C11433),AU077424(C11433) correspond to<br>a region of the predicted gene.; Similar to ABC transporter-7<br>(U43892) [Oryza sativa]  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21739  | Seq. ID | OJ990405_12.9819.C7 |
| Gene No. | 45360  | Strand  | +                   |
| Start    | 415  | End     | 7129                |
| Name     | OJ990405_12.9819.C7.o1.gs  | Method  | GENSCAN             |
| Start    | 425  | End     | 6825                |
| GI       | none   | Score   | .75                 |
| Exons    | 425..634, 642..730, 936..1196, 1610..1712, 1863..1970,<br>2084..2167, 2273..2333, 2744..2889, 3351..3467, 3573..3658,<br>4218..4306, 4966..5021, 5155..5235, 5500..5565, 5693..5785,<br>5886..5950, 6232..6367, 6679..6825 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21739  | Seq. ID | OJ990405_12.9819.C7 |
| Gene No.    | 45360  | Strand  | +                   |
| Start       | 415  | End     | 7129                |
| Name        | OJ990405_12.9819.C7.o1.gp  | Method  | AAT/GAP             |
| Start       | 4250   | End     | 6288                |
| GI          | LIB3433-040-P1-K1-C8   | Score   | 785                 |
| Exons       | 4250..4306, 4966..5021, 5155..5235, 5500..5565, 5693..5785,<br>5886..5950, 6232..6288  |         |                     |
| GI Descrip. | '5734621/dbj BAA83352.1  2.0e-80 (AP000391) ESTs<br>AU067992(C11433),AU077424(C11433) correspond to a region of the<br>predicted gene.; Similar to ABC transporter-7 (U43892) [Oryza<br>sativa]' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21739   | Seq. ID | OJ990405_12.9819.C7 |
| Gene No.    | 45360   | Strand  | +                   |
| Start       | 415   | End     | 7129                |
| Name        | OJ990405_12.9819.C7.o2.gp                                     | Method  | AAT/GAP             |
| Start       | 6660  | End     | 7129                |
| GI          | 12911_1.R1084   | Score   | 819                 |
| Exons       | 6660..7129  |         |                     |
| GI Descrip. | '5734616/dbj AP000391.1 AP000391 0.0e+00 Oryza sativa genomic |         |                     |

DNA, chromosome 6, clone:P0538C01'

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21739  | Seq. ID | OJ990405_12.9819.C7 |
| Gene No.    | 45361  | Strand  | +                   |
| Start       | 7467   | End     | 7899                |
| Name        | OJ990405_12.9819.C7.o3.gp  | Method  | AAT/GAP             |
| Start       | 7467   | End     | 7899                |
| GI          | 5004333  | Score   | 790                 |
| Exons       | 7467..7899   |         |                     |
| GI Descrip. | 5734616/dbj AP000391.1 AP000391 0.0e+00 Oryza sativa genomic DNA, chromosome 6, clone:P0538C01 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21739  | Seq. ID | OJ990405_12.9819.C7 |
| Gene No. | 45362  | Strand  | -                   |
| Start    | 7352   | End     | 7683                |
| Name     | OJ990405_12.9819.C7.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 1151   | End     | 2335                |
| GI       | none   | Score   | 68                  |
| Exons    | 1151..1195, 1153..1194, 1599..1715, 1604..1726, 1827..1910, 1837..1884, 1862..1960, 1862..1978, 2080..2166, 2081..2185, 2081..2167, 2270..2335, 2272..2334 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21739  | Seq. ID | OJ990405_12.9819.C7 |
| Gene No. | 45362  | Strand  | -                   |
| Start    | 7352   | End     | 7683                |
| Name     | OJ990405_12.9819.C7.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 1640   | End     | 5003                |
| GI       | none   | Score   | 87                  |
| Exons    | 1640..1708, 1641..1709, 1641..1709, 1853..1984, 1860..1970, 2081..2185, 2081..2182, 2270..2332, 2272..2334, 2741..2842, 2744..2902, 2745..2894, 2745..2915, 2746..2895, 3334..3468, 3340..3468, 3350..3475, 3350..3469, 3354..3470, 3555..3656, 3557..3655, 4201..4323, 4227..4307, 4956..5003 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21739  | Seq. ID | OJ990405_12.9819.C7 |
| Gene No. | 45362  | Strand  | -                   |
| Start    | 7352   | End     | 7683                |
| Name     | OJ990405_12.9819.C7.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 2085   | End     | 2846                |
| GI       | none   | Score   | 84                  |
| Exons    | 2085..2168, 2085..2165, 2086..2166, 2087..2185, 2270..2335, 2272..2328, 2743..2844, 2746..2844, 2748..2846 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21739  | Seq. ID | OJ990405_12.9819.C7 |
| Gene No. | 45362  | Strand  | -                   |
| Start    | 7352   | End     | 7683                |
| Name     | OJ990405_12.9819.C7.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 2847   | End     | 4293                |
| GI       | none   | Score   | 73                  |
| Exons    | 2847..2894, 2848..2895, 3343..3468, 3350..3472, 3350..3472, 3351..3473, 3355..3480, 3555..3659, 3557..3661, 3557..3661, 3558..3665, 3559..3666, 4044..4112, 4208..4279, 4212..4292, 4217..4291, 4218..4292, 4219..4293 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 21739 | Seq. ID | OJ990405_12.9819.C7 |
| Gene No. | 45362 | Strand  | -                   |
| Start    | 7352  | End     | 7683                |

Name OJ990405\_12.9819.C7.o1.tc Method TBLASTX:Cress  
 Start 4219 End 5924  
 GI none Score 128  
 Exons 4219..4323, 4224..4310, 4956..5027, 4961..5029, 5146..5232,  
 5155..5244, 5160..5237, 5499..5567, 5500..5568, 5680..5790,  
 5690..5782, 5880..5924

Seq. No. 21739 Seq. ID OJ990405\_12.9819.C7  
 Gene No. 45362 Strand -  
 Start 7352 End 7683  
 Name OJ990405\_12.9819.C7.o2.ts Method TBLASTX:Soybean  
 Start 5163 End 5924  
 GI none Score 59  
 Exons 5163..5234, 5164..5244, 5172..5237, 5499..5567, 5500..5568,  
 5680..5790, 5690..5788, 5690..5797, 5849..5923, 5880..5924

Seq. No. 21739 Seq. ID OJ990405\_12.9819.C7  
 Gene No. 45362 Strand -  
 Start 7352 End 7683  
 Name OJ990405\_12.9819.C7.o2.gs Method GENSCAN  
 Start 7352 End 7683  
 GI none Score .81  
 Exons 7352..7422, 7608..7683

Seq. No. 21740 Seq. ID OJ990405\_12.9819.C8  
 Gene No. 45363 Strand +  
 Start 1 End 5027  
 Name OJ990405\_12.9819.C8.o1.np Method AAT/NAP  
 Start 1 End 3468  
 GI 6403492 Score 1283  
 Exons 1..120, 232..317, 890..915, 967..1008, 1151..1261, 1478..1576,  
 1701..1823, 2024..2086, 2160..2224, 2311..2420, 2502..2616,  
 2695..2760, 3148..3258, 3390..3468  
 GI Descrip. (AC010871) unknown protein [Arabidopsis thaliana]

Seq. No. 21740 Seq. ID OJ990405\_12.9819.C8  
 Gene No. 45363 Strand +  
 Start 1 End 5027  
 Name OJ990405\_12.9819.C8.o1.gp Method AAT/GAP  
 Start 34 End 110  
 GI 53395\_1.R1084 Score 133  
 Exons 34..110  
 GI Descrip. '5734616/dbj|AP000391.1|AP000391 0.0e+00 Oryza sativa genomic  
 DNA, chromosome 6, clone:P0538C01'

Seq. No. 21740 Seq. ID OJ990405\_12.9819.C8  
 Gene No. 45363 Strand +  
 Start 1 End 5027  
 Name OJ990405\_12.9819.C8.o1.gs Method GENSCAN  
 Start 92 End 5027  
 GI none Score .86  
 Exons 92..120, 232..317, 890..1008, 1151..1261, 1701..1823,  
 2024..2086, 3171..3258, 4101..4211, 4621..5027

Seq. No. 21740 Seq. ID OJ990405\_12.9819.C8  
 Gene No. 45363 Strand +  
 Start 1 End 5027



Name OJ990405\_12.9819.C8.o2.gp Method AAT/GAP  
 Start 884 End 2181  
 GI uC-osflcyp086e04b1 Score 949  
 Exons 884..1008, 1151..1261, 1478..1576, 1701..1823, 2024..2086,  
 2160..2181  
 GI Descrip. '5734620/dbj|BAA83351.1| 4.0e-17 (AP000391) ESTs  
 AU077435(C12539),C26534(C12539) correspond to a region of the  
 predicted gene.; hypothetical protein [Oryza sativa]'

Seq. No. 21740 Seq. ID OJ990405\_12.9819.C8  
 Gene No. 45363 Strand +  
 Start 1 End 5027  
 Name OJ990405\_12.9819.C8.o3.gp Method AAT/GAP  
 Start 2399 End 4064  
 GI 53223 1.R1084 Score 1656  
 Exons 2399..2420, 2502..2616, 2695..2760, 3148..3258, 3390..3456,  
 3547..4064  
 GI Descrip. '5734620/dbj|BAA83351.1| 1.0e-20 (AP000391) ESTs  
 AU077435(C12539),C26534(C12539) correspond to a region of the  
 predicted gene.; hypothetical protein [Oryza sativa]'

Seq. No. 21740 Seq. ID OJ990405\_12.9819.C8  
 Gene No. 45364 Strand -  
 Start 4668 End 7463  
 Name OJ990405\_12.9819.C8.o3.tm Method TBLASTX:Maize  
 Start 34 End 933  
 GI none Score 145  
 Exons 34..135, 35..121, 230..319, 239..322, 888..932, 888..932,  
 889..933

Seq. No. 21740 Seq. ID OJ990405\_12.9819.C8  
 Gene No. 45364 Strand -  
 Start 4668 End 7463  
 Name OJ990405\_12.9819.C8.o1.tm Method TBLASTX:Maize  
 Start 946 End 3867  
 GI none Score 79  
 Exons 946..1020, 1127..1264, 1146..1223, 1195..1260, 1436..1576,  
 1464..1577, 1468..1587, 1476..1577, 1477..1581, 1687..1812,  
 1692..1841, 1698..1811, 1699..1827, 2021..2086, 2022..2087,  
 2022..2087, 2023..2088, 2153..2224, 2157..2231, 2158..2226,  
 2298..2423, 2298..2420, 2311..2421, 2312..2425, 2479..2619,  
 2486..2620, 2693..2758, 2694..2759, 2695..2760, 3139..3261,  
 3144..3293, 3147..3260, 3378..3455, 3387..3455, 3388..3456,  
 3391..3456, 3539..3598, 3546..3596, 3547..3603, 3547..3597,  
 3548..3598, 3549..3605, 3785..3865, 3789..3860, 3793..3867,  
 3794..3862

Seq. No. 21740 Seq. ID OJ990405\_12.9819.C8  
 Gene No. 45364 Strand -  
 Start 4668 End 7463  
 Name OJ990405\_12.9819.C8.o1.ts Method TBLASTX:Soybean  
 Start 1181 End 2611  
 GI none Score 122  
 Exons 1181..1264, 1195..1257, 1464..1577, 1477..1587, 1478..1576,  
 1480..1584, 1692..1823, 2021..2086, 2050..2082, 2157..2231,  
 2157..2225, 2306..2425, 2311..2421, 2479..2610, 2486..2611

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 21740   | Seq. ID | OJ990405_12.9819.C8 |
| Gene No. | 45364   | Strand  | -                   |
| Start    | 4668  | End     | 7463                |
| Name     | OJ990405_12.9819.C8.o2.tw   | Method  | TBLASTX:Wheat       |
| Start    | 1481  | End     | 2410                |
| GI       | none  | Score   | 139                 |
| Exons    | 1481..1576, 1489..1587, 1490..1576, 1492..1584, 1687..1803,<br>1692..1841, 1698..1811, 1699..1827, 1971..2090, 2021..2086,<br>2022..2087, 2023..2088, 2157..2231, 2159..2242, 2159..2224,<br>2310..2408, 2310..2408, 2311..2409, 2312..2410 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21740  | Seq. ID | OJ990405_12.9819.C8 |
| Gene No. | 45364  | Strand  | -                   |
| Start    | 4668   | End     | 7463                |
| Name     | OJ990405_12.9819.C8.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 2036   | End     | 3594                |
| GI       | none   | Score   | 63                  |
| Exons    | 2036..2086, 2050..2085, 2153..2248, 2157..2231, 2306..2425,<br>2311..2421, 2312..2422, 2313..2438, 2479..2619, 2486..2620,<br>2501..2647, 2693..2758, 2695..2760, 3145..3261, 3145..3261,<br>3146..3262, 3146..3262, 3384..3416, 3387..3440, 3388..3456,<br>3521..3559, 3546..3587, 3547..3594 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 21740   | Seq. ID | OJ990405_12.9819.C8 |
| Gene No. | 45364   | Strand  | -                   |
| Start    | 4668  | End     | 7463                |
| Name     | OJ990405_12.9819.C8.o2.tm   | Method  | TBLASTX:Maize       |
| Start    | 4663  | End     | 6415                |
| GI       | none  | Score   | 171                 |
| Exons    | 4663..4782, 4671..4874, 4674..4886, 4730..4885, 4919..5047,<br>4967..5044, 4975..5046, 5411..5593, 5425..5679, 5494..5694,<br>5689..5820, 5693..5821, 6107..6139, 6109..6138, 6136..6414,<br>6173..6415, 6176..6415 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21740  | Seq. ID | OJ990405_12.9819.C8 |
| Gene No.    | 45364  | Strand  | -                   |
| Start       | 4668   | End     | 7463                |
| Name        | OJ990405_12.9819.C8.o2.np  | Method  | AAT/NAP             |
| Start       | 4668   | End     | 7463                |
| GI          | 5734619  | Score   | 1645                |
| Exons       | 4668..4872, 4968..5045, 5426..5821, 6113..6413, 7418..7463                         |         |                     |
| GI Descrip. | (AP000391) Similar to Arabidopsis thaliana BAC F15P23 (AF128392)<br>[Oryza sativa] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21740  | Seq. ID | OJ990405_12.9819.C8 |
| Gene No. | 45364  | Strand  | -                   |
| Start    | 4668   | End     | 7463                |
| Name     | OJ990405_12.9819.C8.o2.tc                      | Method  | TBLASTX:Cress       |
| Start    | 4668   | End     | 5478                |
| GI       | none   | Score   | 98                  |
| Exons    | 4668..4874, 4668..4889, 4973..5044, 5425..5478 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21740                     | Seq. ID | OJ990405_12.9819.C8 |
| Gene No. | 45364                     | Strand  | -                   |
| Start    | 4668                      | End     | 7463                |
| Name     | OJ990405_12.9819.C8.o2.ts | Method  | TBLASTX:Soybean     |
| Start    | 4674                      | End     | 6601                |

|       |  |       |     |
|-------|--|-------|-----|
| GI    | none   | Score | 116 |
| Exons | 4674..4859, 4674..4889, 4917..5045, 4967..5044, 5411..5599, 5425..5601, 5695..5772, 5696..5773, 5773..5820, 5774..5821, 6163..6417, 6203..6412, 6473..6601 |       |     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21740   | Seq. ID | OJ990405_12.9819.C8 |
| Gene No.    | 45364   | Strand  | -                   |
| Start       | 4668  | End     | 7463                |
| Name        | OJ990405_12.9819.C8.o4.gp   | Method  | AAT/GAP             |
| Start       | 4790  | End     | 5787                |
| GI          | LIB3434-035-P1-K1-C10   | Score   | 971                 |
| Exons       | 4790..4872, 4968..5045, 5426..5787  |         |                     |
| GI Descrip. | '5734619/dbj BAA83350.1  3.0e-96 (AP000391) Similar to Arabidopsis thaliana BAC F15P23 (AF128392) [Oryza sativa]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21740  | Seq. ID | OJ990405_12.9819.C8 |
| Gene No. | 45364  | Strand  | -                   |
| Start    | 4668   | End     | 7463                |
| Name     | OJ990405_12.9819.C8.o3.tw                                  | Method  | TBLASTX:Wheat       |
| Start    | 4809   | End     | 5596                |
| GI       | none   | Score   | 87                  |
| Exons    | 4809..4889, 4917..5045, 4967..5044, 5411..5596, 5425..5589 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21740  | Seq. ID | OJ990405_12.9819.C8 |
| Gene No. | 45364  | Strand  | -                   |
| Start    | 4668   | End     | 7463                |
| Name     | OJ990405_12.9819.C8.o3.tc  | Method  | TBLASTX:Cress       |
| Start    | 5542   | End     | 6417                |
| GI       | none   | Score   | 49                  |
| Exons    | 5542..5601, 5546..5599, 5608..5685, 5689..5820, 5696..5821, 6163..6417, 6194..6415 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21740  | Seq. ID | OJ990405_12.9819.C8 |
| Gene No. | 45364  | Strand  | -                   |
| Start    | 4668   | End     | 7463                |
| Name     | OJ990405_12.9819.C8.o1.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 5746   | End     | 6417                |
| GI       | none   | Score   | 73                  |
| Exons    | 5746..5820, 5750..5821, 6163..6417, 6203..6415 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21741  | Seq. ID | OJ990405_12.9819.C9 |
| Gene No. | 45365  | Strand  | +                   |
| Start    | 1224   | End     | 4553                |
| Name     | OJ990405_12.9819.C9.o1.gs  | Method  | GENSCAN             |
| Start    | 1224   | End     | 4553                |
| GI       | none   | Score   | .78                 |
| Exons    | 1224..1318, 1563..1703, 1866..1901, 1972..2041, 2796..2973, 2996..3358, 3485..3637, 3681..3748, 4178..4270, 4530..4553 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21741  | Seq. ID | OJ990405_12.9819.C9 |
| Gene No.    | 45365  | Strand  | +                   |
| Start       | 1224   | End     | 4553                |
| Name        | OJ990405_12.9819.C9.o2.gp                                      | Method  | AAT/GAP             |
| Start       | 3515   | End     | 3816                |
| GI          | LIB3433-022-P1-K1-E1   | Score   | 563                 |
| Exons       | 3515..3816   |         |                     |
| GI Descrip. | '5734616/dbj AP000391.1 AP000391 1.0e-158 Oryza sativa genomic |         |                     |

DNA, chromosome 6, clone:P0538C01'

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21741   | Seq. ID | OJ990405_12.9819.C9 |
| Gene No.    | 45366   | Strand  | -                   |
| Start       | 1   | End     | 3651                |
| Name        | OJ990405_12.9819.C9.o1.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 3651                |
| GI          | 5734619   | Score   | 1502                |
| Exons       | 1..34, 1129..1339, 2989..3651   |         |                     |
| GI Descrip. | (AP000391) Similar to Arabidopsis thaliana BAC F15P23 (AF128392) [Oryza sativa] |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 21741                              | Seq. ID | OJ990405_12.9819.C9 |
| Gene No. | 45367                              | Strand  | -                   |
| Start    | 5659                               | End     | 6169                |
| Name     | OJ990405_12.9819.C9.o2.tm          | Method  | TBLASTX:Maize       |
| Start    | 1115                               | End     | 3018                |
| GI       | none                               | Score   | 234                 |
| Exons    | 1115..1339, 1140..1340, 2983..3018 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21741  | Seq. ID | OJ990405_12.9819.C9 |
| Gene No. | 45367  | Strand  | -                   |
| Start    | 5659   | End     | 6169                |
| Name     | OJ990405_12.9819.C9.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 1136   | End     | 3384                |
| GI       | none   | Score   | 166                 |
| Exons    | 1136..1339, 1137..1340, 2983..3018, 2987..3019, 3085..3384, 3089..3304 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21741  | Seq. ID | OJ990405_12.9819.C9 |
| Gene No. | 45367  | Strand  | -                   |
| Start    | 5659   | End     | 6169                |
| Name     | OJ990405_12.9819.C9.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 1139   | End     | 3468                |
| GI       | none   | Score   | 166                 |
| Exons    | 1139..1339, 1143..1340, 2983..3018, 2987..3019, 3088..3468, 3089..3301 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21741  | Seq. ID | OJ990405_12.9819.C9 |
| Gene No. | 45367  | Strand  | -                   |
| Start    | 5659   | End     | 6169                |
| Name     | OJ990405_12.9819.C9.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 1170   | End     | 3195                |
| GI       | none   | Score   | 117                 |
| Exons    | 1170..1340, 1172..1339, 2983..3018, 2987..3016, 3085..3195, 3089..3148 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21741                     | Seq. ID | OJ990405_12.9819.C9 |
| Gene No. | 45367                     | Strand  | -                   |
| Start    | 5659                      | End     | 6169                |
| Name     | OJ990405_12.9819.C9.o1.tm | Method  | TBLASTX:Maize       |
| Start    | 3091                      | End     | 3399                |
| GI       | none                      | Score   | 224                 |
| Exons    | 3091..3399, 3092..3373    |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 21741 | Seq. ID | OJ990405_12.9819.C9 |
| Gene No. | 45367 | Strand  | -                   |

Start 5659  
 Name OJ990405\_12.9819.C9.o2.gs  
 Start 5659  
 GI none  
 Exons 5659..5994, 6091..6096

End 6169  
 Method GENSCAN  
 End 6096  
 Score .64

Seq. No. 21741  
 Gene No. 45367  
 Start 5659  
 Name OJ990405\_12.9819.C9.o2.np  
 Start 5684  
 GI 5734618  
 Exons 5684..6169  
 GI Descrip. (AP000391) Similar to Arabidopsis thaliana chromosome II BAC F5H14 genomic sequence; unknown protein (AC006234) [Oryza sativa]

Seq. ID OJ990405\_12.9819.C9  
 Strand -  
 End 6169  
 Method AAT/NAP  
 End 6169  
 Score 674

Seq. No. 21742  
 Gene No. 45368  
 Start 7705  
 Name OJ990405\_12.9819.C10.o4.np  
 Start 7705  
 GI 6598840  
 Exons 7705..7771, 9379..9880  
 GI Descrip. (AC010795) putative transcriptional regulator [Arabidopsis thaliana]

Seq. ID OJ990405\_12.9819.C10  
 Strand +  
 End 9880  
 Method AAT/NAP  
 End 9880  
 Score 137

Seq. No. 21742  
 Gene No. 45368  
 Start 7705  
 Name OJ990405\_12.9819.C10.o3.gs  
 Start 8878  
 GI none  
 Exons 8878..9834

Seq. ID OJ990405\_12.9819.C10  
 Strand +  
 End 9880  
 Method GENSCAN  
 End 9834  
 Score .84

Seq. No. 21742  
 Gene No. 45369  
 Start 1  
 Name OJ990405\_12.9819.C10.o1.np  
 Start 1  
 GI 5734618  
 Exons 1..453  
 GI Descrip. (AP000391) Similar to Arabidopsis thaliana chromosome II BAC F5H14 genomic sequence; unknown protein (AC006234) [Oryza sativa]

Seq. ID OJ990405\_12.9819.C10  
 Strand -  
 End 453  
 Method AAT/NAP  
 End 453  
 Score 656

Seq. No. 21742  
 Gene No. 45370  
 Start 2337  
 Name OJ990405\_12.9819.C10.o2.np  
 Start 2337  
 GI 5734617  
 Exons 2337..2735  
 GI Descrip. (AP000391) hypothetical protein [Oryza sativa]

Seq. ID OJ990405\_12.9819.C10  
 Strand -  
 End 2735  
 Method AAT/NAP  
 End 2735  
 Score 686

Seq. No. 21742  
 Gene No. 45371

Seq. ID OJ990405\_12.9819.C10  
 Strand -

|       |                            |        |                 |
|-------|----------------------------|--------|-----------------|
| Start | 4704                       | End    | 8420            |
| Name  | OJ990405_12.9819.C10.o2.ts | Method | TBLASTX:Soybean |
| Start | 61                         | End    | 243             |
| GI    | none                       | Score  | 111             |
| Exons | 61..243, 122..241          |        |                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21742  | Seq. ID | OJ990405_12.9819.C10 |
| Gene No.    | 45371  | Strand  | -                    |
| Start       | 4704   | End     | 8420                 |
| Name        | OJ990405_12.9819.C10.o1.gp   | Method  | AAT/GAP              |
| Start       | 4551   | End     | 4857                 |
| GI          | uC-osroM202016d07a1  | Score   | 565                  |
| Exons       | 4551..4857   |         |                      |
| GI Descrip. | '1710401/sp P49730 RIR2_TOBAC 2.0e-15 RIBONUCLEOSIDE-DIPHOSPHATE REDUCTASE SMALL CHAIN (RIBONUCLEOTIDE REDUCTASE) (R2 SUBUNIT) >gi_1044912_emb_CAA63194_ (X92443) ribonucleotide reductase R2 [Nicotiana tabacum]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21742  | Seq. ID | OJ990405_12.9819.C10 |
| Gene No. | 45371  | Strand  | -                    |
| Start    | 4704   | End     | 8420                 |
| Name     | OJ990405_12.9819.C10.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 4704   | End     | 5693                 |
| GI       | none   | Score   | 76                   |
| Exons    | 4704..4772, 4704..5690, 4705..5652, 5407..5601, 5619..5693 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21742  | Seq. ID | OJ990405_12.9819.C10 |
| Gene No. | 45371  | Strand  | -                    |
| Start    | 4704   | End     | 8420                 |
| Name     | OJ990405_12.9819.C10.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4704   | End     | 5690                 |
| GI       | none   | Score   | 106                  |
| Exons    | 4704..4745, 4744..4926, 4752..4985, 4755..5531, 4756..5013, 5068..5301, 5349..5531, 5359..5538, 5538..5690, 5539..5649 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21742  | Seq. ID | OJ990405_12.9819.C10 |
| Gene No. | 45371  | Strand  | -                    |
| Start    | 4704   | End     | 8420                 |
| Name     | OJ990405_12.9819.C10.o2.gs                     | Method  | GENSCAN              |
| Start    | 4704   | End     | 8420                 |
| GI       | none   | Score   | .6                   |
| Exons    | 4704..5891, 6094..6232, 7617..7713, 8099..8420 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21742  | Seq. ID | OJ990405_12.9819.C10 |
| Gene No.    | 45371  | Strand  | -                    |
| Start       | 4704   | End     | 8420                 |
| Name        | OJ990405_12.9819.C10.o3.np   | Method  | AAT/NAP              |
| Start       | 4707   | End     | 5699                 |
| GI          | 1710401  | Score   | 1367                 |
| Exons       | 4707..5699   |         |                      |
| GI Descrip. | RIBONUCLEOSIDE-DIPHOSPHATE REDUCTASE SMALL CHAIN (RIBONUCLEOTIDE REDUCTASE) (R2 SUBUNIT) gi 1044912 emb CAA63194  (X92443) ribonucleotide reductase R2 [Nicotiana tabacum] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21742 | Seq. ID | OJ990405_12.9819.C10 |
| Gene No. | 45371 | Strand  | -                    |
| Start    | 4704  | End     | 8420                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990405_12.9819.C10.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 4746   | End     | 5693                 |
| GI          | none   | Score   | 255                  |
| Exons       | 4746..5486, 4747..5016, 5071..5226, 5106..5297, 5284..5445, 5448..5534, 5449..5538, 5535..5693, 5536..5646   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21742  | Seq. ID | OJ990405_12.9819.C10 |
| Gene No.    | 45371  | Strand  | -                    |
| Start       | 4704   | End     | 8420                 |
| Name        | OJ990405_12.9819.C10.o1.tw   | Method  | TBLASTX:Wheat        |
| Start       | 4866   | End     | 5601                 |
| GI          | none   | Score   | 148                  |
| Exons       | 4866..4988, 4866..5441, 4867..5442, 5103..5444, 5392..5601   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21742  | Seq. ID | OJ990405_12.9819.C10 |
| Gene No.    | 45371  | Strand  | -                    |
| Start       | 4704   | End     | 8420                 |
| Name        | OJ990405_12.9819.C10.o2.gp   | Method  | AAT/GAP              |
| Start       | 5320   | End     | 5806                 |
| GI          | 55172_1.R1084  | Score   | 906                  |
| Exons       | 5320..5806   |         |                      |
| GI Descrip. | '1710401/sp P49730 RIR2_TOBAC 3.0e-50 RIBONUCLEOSIDE-DIPHOSPHATE REDUCTASE SMALL CHAIN (RIBONUCLEOTIDE REDUCTASE) (R2 SUBUNIT) >gi_1044912_emb_CAA63194_ (X92443) ribonucleotide reductase R2 [Nicotiana tabacum]' |         |                      |
|             |  |         |                      |
| Seq. No.    | 21742  | Seq. ID | OJ990405_12.9819.C10 |
| Gene No.    | 45372  | Strand  | -                    |
| Start       | 9502   | End     | 9706                 |
| Name        | OJ990405_12.9819.C10.o2.tm   | Method  | TBLASTX:Maize        |
| Start       | 9502   | End     | 9706                 |
| GI          | none   | Score   | 138                  |
| Exons       | 9502..9630, 9601..9633, 9619..9705, 9620..9706   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21743  | Seq. ID | OJ990405_12.9819.C11 |
| Gene No.    | 45373  | Strand  | +                    |
| Start       | 1  | End     | 887                  |
| Name        | OJ990405_12.9819.C11.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 827                  |
| GI          | 6598840  | Score   | 496                  |
| Exons       | 1..827   |         |                      |
| GI Descrip. | (AC010795) putative transcriptional regulator [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21743  | Seq. ID | OJ990405_12.9819.C11 |
| Gene No.    | 45373  | Strand  | +                    |
| Start       | 1  | End     | 887                  |
| Name        | OJ990405_12.9819.C11.o1.gs   | Method  | GENSCAN              |
| Start       | 141  | End     | 887                  |
| GI          | none   | Score   | .61                  |
| Exons       | 141..887   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21743  | Seq. ID | OJ990405_12.9819.C11 |
| Gene No.    | 45374  | Strand  | -                    |
| Start       | 1955   | End     | 3501                 |
| Name        | OJ990405_12.9819.C11.o2.tm   | Method  | TBLASTX:Maize        |
| Start       | 112  | End     | 406                  |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| GI          | none   | Score   | 195                  |
| Exons       | 112..153, 197..298, 198..329, 207..332, 347..406   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21743  | Seq. ID | OJ990405_12.9819.C11 |
| Gene No.    | 45374  | Strand  | -                    |
| Start       | 1955   | End     | 3501                 |
| Name        | OJ990405_12.9819.C11.o2.gs   | Method  | GENSCAN              |
| Start       | 1955   | End     | 3341                 |
| GI          | none   | Score   | .83                  |
| Exons       | 1955..2077, 2181..2331, 3223..3341   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21743  | Seq. ID | OJ990405_12.9819.C11 |
| Gene No.    | 45374  | Strand  | -                    |
| Start       | 1955   | End     | 3501                 |
| Name        | OJ990405_12.9819.C11.o2.np   | Method  | AAT/NAP              |
| Start       | 3030   | End     | 3501                 |
| GI          | 3600039  | Score   | 574                  |
| Exons       | 3030..3501   |         |                      |
| GI Descrip. | (AF080119) similar to Schizosaccharomyces pombe isp4 protein (GB:D14061) [Arabidopsis thaliana]            |         |                      |
|             |  |         |                      |
| Seq. No.    | 21743  | Seq. ID | OJ990405_12.9819.C11 |
| Gene No.    | 45374  | Strand  | -                    |
| Start       | 1955   | End     | 3501                 |
| Name        | OJ990405_12.9819.C11.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 3031   | End     | 3467                 |
| GI          | none   | Score   | 129                  |
| Exons       | 3031..3225, 3042..3467, 3289..3465   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21743  | Seq. ID | OJ990405_12.9819.C11 |
| Gene No.    | 45374  | Strand  | -                    |
| Start       | 1955   | End     | 3501                 |
| Name        | OJ990405_12.9819.C11.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 3037   | End     | 3468                 |
| GI          | none   | Score   | 158                  |
| Exons       | 3037..3180, 3042..3179, 3180..3305, 3181..3306, 3204..3308, 3307..3453, 3309..3452, 3309..3467, 3319..3468 |         |                      |
|             |  |         |                      |
| Seq. No.    | 21743  | Seq. ID | OJ990405_12.9819.C11 |
| Gene No.    | 45374  | Strand  | -                    |
| Start       | 1955   | End     | 3501                 |
| Name        | OJ990405_12.9819.C11.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 3042   | End     | 3452                 |
| GI          | none   | Score   | 271                  |
| Exons       | 3042..3116, 3111..3452   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21744  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No.    | 45375  | Strand  | +                    |
| Start       | 3061   | End     | 3509                 |
| Name        | OJ990405_12.9819.C12.o1.gp   | Method  | AAT/GAP              |
| Start       | 3061   | End     | 3509                 |
| GI          | 287187   | Score   | 639                  |
| Exons       | 3061..3078, 3152..3509   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21744  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No.    | 45376  | Strand  | -                    |
| Start       | 1  | End     | 4484                 |



|             |   |        |         |
|-------------|---|--------|---------|
| Name        | OJ990405_12.9819.C12.o1.np  | Method | AAT/NAP |
| Start       | 1   | End    | 4484    |
| GI          | 3600039   | Score  | 2093    |
| Exons       | 1..82, 200..382, 464..719, 799..1368, 2638..2735, 2822..3257, 3417..3510, 4430..4484            |        |         |
| GI Descrip. | (AF080119) similar to Schizosaccharomyces pombe isp4 protein (GB:D14061) [Arabidopsis thaliana] |        |         |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21744   | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45376   | Strand  | -                    |
| Start    | 1   | End     | 4484                 |
| Name     | OJ990405_12.9819.C12.o1.gs  | Method  | GENSCAN              |
| Start    | 200   | End     | 3484                 |
| GI       | none  | Score   | .73                  |
| Exons    | 200..382, 464..752, 799..1368, 2638..2735, 2822..3282, 3391..3484 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21744   | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377   | Strand  | -                    |
| Start    | 5044  | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 32  | End     | 1203                 |
| GI       | none  | Score   | 45                   |
| Exons    | 32..85, 33..83, 188..349, 189..380, 197..385, 437..544, 464..718, 465..722, 795..923, 798..1025, 1029..1202, 1029..1148, 1072..1203, 1159..1200 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21744  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377  | Strand  | -                    |
| Start    | 5044   | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o2.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 231  | End     | 682                  |
| GI       | none   | Score   | 128                  |
| Exons    | 231..383, 231..383, 233..385, 464..682, 465..554, 615..680 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21744                                  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377                                  | Strand  | -                    |
| Start    | 5044                                   | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o1.tc             | Method  | TBLASTX:Cress        |
| Start    | 314                                    | End     | 932                  |
| GI       | none                                   | Score   | 134                  |
| Exons    | 314..385, 464..718, 468..722, 798..932 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21744  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377  | Strand  | -                    |
| Start    | 5044   | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 891  | End     | 1384                 |
| GI       | none   | Score   | 105                  |
| Exons    | 891..1034, 892..1014, 1029..1370, 1042..1374, 1047..1376, 1096..1374, 1223..1384 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21744                      | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377                      | Strand  | -                    |
| Start    | 5044                       | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 1203                       | End     | 1377                 |

|          |  |         |                      |
|----------|--|---------|----------------------|
| GI       | none   | Score   | 152                  |
| Exons    | 1203..1367, 1207..1377   |         |                      |
|          |  |         |                      |
| Seq. No. | 21744  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377  | Strand  | -                    |
| Start    | 5044   | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 2637   | End     | 3302                 |
| GI       | none   | Score   | 100                  |
| Exons    | 2637..2735, 2641..2736, 2648..2737, 2819..2926, 2921..2992, 2925..2987, 2951..2992, 3014..3133, 3125..3253, 3126..3302   |         |                      |
|          |  |         |                      |
| Seq. No. | 21744  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377  | Strand  | -                    |
| Start    | 5044   | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 2921   | End     | 3253                 |
| GI       | none   | Score   | 75                   |
| Exons    | 2921..3007, 2922..2981, 3029..3253, 3057..3242   |         |                      |
|          |  |         |                      |
| Seq. No. | 21744  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377  | Strand  | -                    |
| Start    | 5044   | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 2948   | End     | 3299                 |
| GI       | none   | Score   | 56                   |
| Exons    | 2948..2995, 2949..2996, 3014..3253, 3057..3299   |         |                      |
|          |  |         |                      |
| Seq. No. | 21744  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377  | Strand  | -                    |
| Start    | 5044   | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o2.gs   | Method  | GENSCAN              |
| Start    | 5044   | End     | 6988                 |
| GI       | none   | Score   | .79                  |
| Exons    | 5044..5156, 6191..6272, 6354..6415, 6539..6779, 6867..6988   |         |                      |
|          |  |         |                      |
| Seq. No. | 21744  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377  | Strand  | -                    |
| Start    | 5044   | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 5095   | End     | 6972                 |
| GI       | none   | Score   | 80                   |
| Exons    | 5095..5157, 5096..5158, 6189..6272, 6190..6276, 6244..6276, 6335..6403, 6354..6413, 6355..6414, 6388..6414, 6513..6632, 6535..6633, 6543..6632, 6615..6716, 6864..6971, 6868..6972 |         |                      |
|          |  |         |                      |
| Seq. No. | 21744  | Seq. ID | OJ990405_12.9819.C12 |
| Gene No. | 45377  | Strand  | -                    |
| Start    | 5044   | End     | 6988                 |
| Name     | OJ990405_12.9819.C12.o4.ts   | Method  | TBLASTX:Soybean      |
| Start    | 6204   | End     | 6611                 |
| GI       | none   | Score   | 100                  |
| Exons    | 6204..6269, 6241..6276, 6354..6413, 6355..6414, 6528..6611   |         |                      |
|          |  |         |                      |
| Seq. No. | 21745  | Seq. ID | OJ990405_12.9819.C13 |
| Gene No. | 45378  | Strand  | +                    |
| Start    | 776  | End     | 903                  |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990405_12.9819.C13.o1.gs   | Method  | GENSCAN              |
| Start       | 776  | End     | 903                  |
| GI          | none   | Score   | .85                  |
| Exons       | 776..903   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21745  | Seq. ID | OJ990405_12.9819.C13 |
| Gene No.    | 45379  | Strand  | -                    |
| Start       | 1  | End     | 1567                 |
| Name        | OJ990405_12.9819.C13.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 1567                 |
| GI          | 5852093  | Score   | 59                   |
| Exons       | 1..29, 401..490, 1544..1567  |         |                      |
| GI Descrip. | (AL117264) zwh16.1 [Oryza sativa]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No.    | 45380  | Strand  | +                    |
| Start       | 3760   | End     | 17840                |
| Name        | OJ990405_12.9819.C14.o1.np   | Method  | AAT/NAP              |
| Start       | 3760   | End     | 5967                 |
| GI          | 1899175  | Score   | 672                  |
| Exons       | 3760..3802, 4374..4481, 5058..5583, 5671..5967   |         |                      |
| GI Descrip. | (U90262) calcium-dependent calmodulin-independent protein kinase CDPK [Cucurbita pepo] |         |                      |
|             |  |         |                      |
| Seq. No.    | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No.    | 45380  | Strand  | +                    |
| Start       | 3760   | End     | 17840                |
| Name        | OJ990405_12.9819.C14.o2.np   | Method  | AAT/NAP              |
| Start       | 4315   | End     | 17840                |
| GI          | 5734709  | Score   | 92                   |
| Exons       | 4315..4508, 4651..4686, 7839..8128, 17537..17840                                       |         |                      |
| GI Descrip. | (AC008075) Contains PF 00069 Eukaryotic protein kinase domain. [Arabidopsis thaliana]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No.    | 45380  | Strand  | +                    |
| Start       | 3760   | End     | 17840                |
| Name        | OJ990405_12.9819.C14.o1.gp   | Method  | AAT/GAP              |
| Start       | 4373   | End     | 4824                 |
| GI          | none   | Score   | 801                  |
| Exons       | 4373..4824   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No.    | 45380  | Strand  | +                    |
| Start       | 3760   | End     | 17840                |
| Name        | OJ990405_12.9819.C14.o2.gp   | Method  | AAT/GAP              |
| Start       | 5060   | End     | 5508                 |
| GI          | uC-osflM202066e05b1  | Score   | 874                  |
| Exons       | 5060..5508   |         |                      |
| GI Descrip. | '3320104/emb CAA07481  3.0e-39 (AJ007366) calcium-dependent protein kinase [Zea mays]' |         |                      |
|             |  |         |                      |
| Seq. No.    | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No.    | 45380  | Strand  | +                    |
| Start       | 3760   | End     | 17840                |
| Name        | OJ990405_12.9819.C14.o2.gs   | Method  | GENSCAN              |
| Start       | 7881   | End     | 16834                |

|       |  |       |     |
|-------|--|-------|-----|
| GI    | none   | Score | .76 |
| Exons | 7881..7952, 8032..8128, 8217..8391, 8463..8568, 8600..8748, 10015..10147, 10875..10992, 11199..11279, 11402..11466, 12167..12223, 12697..12768, 12890..13135, 13748..13851, 13951..14043, 14178..14208, 14241..14348, 14516..14634, 15158..15295, 15372..15457, 15981..16085, 16252..16380, 16701..16834 |       |     |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45381  | Strand  | -                    |
| Start    | 588  | End     | 7455                 |
| Name     | OJ990405_12.9819.C14.o1.gs   | Method  | GENSCAN              |
| Start    | 588  | End     | 7205                 |
| GI       | none   | Score   | .48                  |
| Exons    | 588..743, 3989..4055, 4378..5066, 5097..5580, 6582..6895, 6963..7205 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21746                      | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45381                      | Strand  | -                    |
| Start    | 588                        | End     | 7455                 |
| Name     | OJ990405_12.9819.C14.o3.gp | Method  | AAT/GAP              |
| Start    | 6646                       | End     | 7455                 |
| GI       | none                       | Score   | 1541                 |
| Exons    | 6646..7455                 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382  | Strand  | -                    |
| Start    | 17570  | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 5034   | End     | 5996                 |
| GI       | none   | Score   | 451                  |
| Exons    | 5034..5585, 5082..5354, 5411..5584, 5654..5818, 5670..5996, 5870..5962 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382  | Strand  | -                    |
| Start    | 17570  | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 5058   | End     | 5984                 |
| GI       | none   | Score   | 440                  |
| Exons    | 5058..5582, 5111..5218, 5282..5365, 5411..5560, 5678..5962, 5688..5966, 5700..5984, 5803..5979 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382  | Strand  | -                    |
| Start    | 17570  | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 5117   | End     | 5984                 |
| GI       | none   | Score   | 454                  |
| Exons    | 5117..5218, 5118..5585, 5133..5354, 5282..5365, 5411..5563, 5448..5564, 5464..5571, 5651..5809, 5670..5966, 5706..5984 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21746                      | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382                      | Strand  | -                    |
| Start    | 17570                      | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 5253                       | End     | 5525                 |

|       |  |       |     |
|-------|--|-------|-----|
| GI    | none   | Score | 274 |
| Exons | 5253..5525, 5262..5354, 5273..5365, 5420..5524 |       |     |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382  | Strand  | -                    |
| Start    | 17570  | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o1.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 5532   | End     | 5966                 |
| GI       | none   | Score   | 56                   |
| Exons    | 5532..5585, 5669..5725, 5670..5966, 5750..5818, 5870..5965 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382  | Strand  | -                    |
| Start    | 17570  | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 6552   | End     | 7205                 |
| GI       | none   | Score   | 49                   |
| Exons    | 6552..6581, 6588..6734, 6590..6736, 6738..6755, 6755..6829, 6756..6830, 6854..6898, 6855..6920, 7034..7126, 7038..7124, 7059..7169, 7115..7204, 7128..7205 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382  | Strand  | -                    |
| Start    | 17570  | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 7916   | End     | 8326                 |
| GI       | none   | Score   | 56                   |
| Exons    | 7916..7951, 7917..7952, 8029..8100, 8034..8102, 8145..8252, 8215..8256, 8218..8301, 8219..8326 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21746  | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382  | Strand  | -                    |
| Start    | 17570  | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 7917   | End     | 8520                 |
| GI       | none   | Score   | 50                   |
| Exons    | 7917..7955, 8029..8067, 8212..8295, 8216..8395, 8228..8395, 8463..8504, 8464..8520 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21746                              | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382                              | Strand  | -                    |
| Start    | 17570                              | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o2.ts         | Method  | TBLASTX:Soybean      |
| Start    | 8218                               | End     | 8568                 |
| GI       | none                               | Score   | 253                  |
| Exons    | 8218..8301, 8219..8395, 8464..8568 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21746   | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382   | Strand  | -                    |
| Start    | 17570   | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o3.tm  | Method  | TBLASTX:Maize        |
| Start    | 8542  | End     | 13059                |
| GI       | none  | Score   | 38                   |
| Exons    | 8542..8568, 8647..8757, 8648..8743, 8667..8747, 10014..10109, 10015..10104, 10883..10984, 10890..10994, 10890..10991, 11198..11278, 11199..11273, 11200..11277, 11386..11475, 11402..11473, 12164..12226, 12165..12224, 12166..12228, |         |                      |

12166..12225, 12691..12768, 12697..12768, 12698..12769,  
12699..12779, 12732..12779, 12875..13057, 12886..13053,  
12888..13058, 12889..13059

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21746                      | Seq. ID | OJ990405_12.9819.C14 |
| Gene No. | 45382                      | Strand  | -                    |
| Start    | 17570                      | End     | 17806                |
| Name     | OJ990405_12.9819.C14.o3.gs | Method  | GENSCAN              |
| Start    | 17570                      | End     | 17806                |
| GI       | none                       | Score   | .55                  |
| Exons    | 17570..17806               |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21747                      | Seq. ID | OJ990405_12.9819.C15 |
| Gene No. | 45383                      | Strand  | +                    |
| Start    | 245                        | End     | 1935                 |
| Name     | OJ990405_12.9819.C15.o1.gs | Method  | GENSCAN              |
| Start    | 245                        | End     | 1935                 |
| GI       | none                       | Score   | .46                  |
| Exons    | 245..331, 1615..1935       |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21748   | Seq. ID | OJ990405_12.9819.C16 |
| Gene No. | 45384   | Strand  | -                    |
| Start    | 588   | End     | 8156                 |
| Name     | OJ990405_12.9819.C16.o1.gs  | Method  | GENSCAN              |
| Start    | 588   | End     | 8156                 |
| GI       | none  | Score   | .76                  |
| Exons    | 588..745, 751..945, 2661..2817, 2891..3193, 5274..5447,<br>5536..5610, 6073..6147, 6242..6449, 7331..7409, 8037..8156 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21748   | Seq. ID | OJ990405_12.9819.C16 |
| Gene No.    | 45384   | Strand  | -                    |
| Start       | 588   | End     | 8156                 |
| Name        | OJ990405_12.9819.C16.o1.gp  | Method  | AAT/GAP              |
| Start       | 1004  | End     | 1178                 |
| GI          | LIB3433-026-P1-K1-C1  | Score   | 233                  |
| Exons       | 1004..1178  |         |                      |
| GI Descrip. | '5852170/emb AL117265.1 OST17804 1.0e-44 Oryza sativa<br>indica (GLA4) genomic DNA, chromosome 4, BAC clone:t17804' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21748   | Seq. ID | OJ990405_12.9819.C16 |
| Gene No.    | 45384   | Strand  | -                    |
| Start       | 588   | End     | 8156                 |
| Name        | OJ990405_12.9819.C16.o1.np  | Method  | AAT/NAP              |
| Start       | 1558  | End     | 3111                 |
| GI          | 6063554   | Score   | 153                  |
| Exons       | 1558..1729, 2784..2836, 2921..3111  |         |                      |
| GI Descrip. | (AP000615) ESTs AU075609(C63344), C71850(E0464), C98611(E0464)<br>correspond to a region of the predicted gene.; hypothetical<br>protein [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21748   | Seq. ID | OJ990405_12.9819.C16 |
| Gene No. | 45384   | Strand  | -                    |
| Start    | 588   | End     | 8156                 |
| Name     | OJ990405_12.9819.C16.o2.gp                                  | Method  | AAT/GAP              |
| Start    | 4846  | End     | 7435                 |
| GI       | 12948_1.R1084   | Score   | 2080                 |
| Exons    | 4846..5171, 5274..5447, 5536..5610, 5702..5782, 5901..5975, |         |                      |

6073..6147, 6242..6449, 7331..7435  
 GI Descrip. '5734616/dbj|AP000391.1|AP000391 5.0e-95 Oryza sativa genomic  
 DNA, chromosome 6, clone:P0538C01'

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21748   | Seq. ID | OJ990405_12.9819.C16 |
| Gene No. | 45384   | Strand  | -                    |
| Start    | 588   | End     | 8156                 |
| Name     | OJ990405_12.9819.C16.o2.tw  | Method  | TBLASTX:Wheat        |
| Start    | 5053  | End     | 5403                 |
| GI       | none  | Score   | 58                   |
| Exons    | 5053..5172, 5112..5174, 5114..5173, 5271..5402, 5278..5400,<br>5278..5403 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21748  | Seq. ID | OJ990405_12.9819.C16 |
| Gene No. | 45384  | Strand  | -                    |
| Start    | 588  | End     | 8156                 |
| Name     | OJ990405_12.9819.C16.o2.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 5145   | End     | 5453                 |
| GI       | none   | Score   | 40                   |
| Exons    | 5145..5174, 5146..5172, 5268..5396, 5271..5453, 5275..5445 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21748   | Seq. ID | OJ990405_12.9819.C16 |
| Gene No. | 45384   | Strand  | -                    |
| Start    | 588   | End     | 8156                 |
| Name     | OJ990405_12.9819.C16.o2.np  | Method  | AAT/NAP              |
| Start    | 5232  | End     | 6436                 |
| GI       | 3386621   | Score   | 699                  |
| Exons    | 5232..5454, 5543..5610, 5702..5782, 5901..5975, 6073..6147,<br>6242..6436 |         |                      |

GI Descrip. (AC004665) unknown protein [Arabidopsis thaliana]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21748  | Seq. ID | OJ990405_12.9819.C16 |
| Gene No. | 45384  | Strand  | -                    |
| Start    | 588  | End     | 8156                 |
| Name     | OJ990405_12.9819.C16.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 5271   | End     | 6433                 |
| GI       | none   | Score   | 191                  |
| Exons    | 5271..5453, 5278..5448, 5537..5608, 5541..5609, 5685..5783,<br>5694..5783, 5699..5785, 5901..5954, 5901..5978, 5902..5976,<br>6073..6156, 6074..6148, 6078..6149, 6242..6433, 6243..6389 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21748                      | Seq. ID | OJ990405_12.9819.C16 |
| Gene No. | 45384                      | Strand  | -                    |
| Start    | 588                        | End     | 8156                 |
| Name     | OJ990405_12.9819.C16.o2.tc | Method  | TBLASTX:Cress        |
| Start    | 5271                       | End     | 5450                 |
| GI       | none                       | Score   | 164                  |
| Exons    | 5271..5450, 5272..5448     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21748  | Seq. ID | OJ990405_12.9819.C16 |
| Gene No. | 45384  | Strand  | -                    |
| Start    | 588  | End     | 8156                 |
| Name     | OJ990405_12.9819.C16.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 5406   | End     | 6284                 |
| GI       | none   | Score   | 50                   |
| Exons    | 5406..5453, 5407..5448, 5519..5656, 5541..5609, 5694..5783,<br>5699..5785, 5702..5785, 5901..5978, 5902..5976, 5903..5977, |         |                      |

6073..6156, 6074..6148, 6075..6149, 6242..6283, 6243..6284

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21748  | Seq. ID | OJ990405_12.9819.C16 |
| Gene No. | 45384  | Strand  | -                    |
| Start    | 588  | End     | 8156                 |
| Name     | OJ990405_12.9819.C16.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 5699   | End     | 6436                 |
| GI       | none   | Score   | 83                   |
| Exons    | 5699..5785, 5899..5976, 5901..5978, 6073..6156, 6074..6154, 6242..6415, 6242..6436 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21748  | Seq. ID | OJ990405_12.9819.C16 |
| Gene No. | 45384  | Strand  | -                    |
| Start    | 588  | End     | 8156                 |
| Name     | OJ990405_12.9819.C16.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 5699   | End     | 6433                 |
| GI       | none   | Score   | 76                   |
| Exons    | 5699..5785, 5901..5978, 5908..5976, 6073..6156, 6074..6154, 6242..6433, 6243..6389, 6364..6432 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21749   | Seq. ID | OJ990405_12.9819.C17 |
| Gene No.    | 45385   | Strand  | +                    |
| Start       | 881   | End     | 1055                 |
| Name        | OJ990405_12.9819.C17.o1.np  | Method  | AAT/NAP              |
| Start       | 881   | End     | 1055                 |
| GI          | 5734621   | Score   | 145                  |
| Exons       | 881..1055   |         |                      |
| GI Descrip. | (AP000391) ESTs AU067992(C11433),AU077424(C11433) correspond to a region of the predicted gene.; Similar to ABC transporter-7 (U43892) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21750  | Seq. ID | OJ990405_12.9819.C19 |
| Gene No. | 45386  | Strand  | +                    |
| Start    | 5133   | End     | 7519                 |
| Name     | OJ990405_12.9819.C19.o2.gs                     | Method  | GENSCAN              |
| Start    | 5133   | End     | 7253                 |
| GI       | none   | Score   | .84                  |
| Exons    | 5133..5390, 6094..6306, 6886..7039, 7192..7253 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21750   | Seq. ID | OJ990405_12.9819.C19 |
| Gene No.    | 45386   | Strand  | +                    |
| Start       | 5133  | End     | 7519                 |
| Name        | OJ990405_12.9819.C19.o2.np  | Method  | AAT/NAP              |
| Start       | 5133  | End     | 7519                 |
| GI          | 5734621   | Score   | 1100                 |
| Exons       | 5133..5390, 6094..6306, 6853..7039, 7192..7248, 7467..7519  |         |                      |
| GI Descrip. | (AP000391) ESTs AU067992(C11433),AU077424(C11433) correspond to a region of the predicted gene.; Similar to ABC transporter-7 (U43892) [Oryza sativa] |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21750                              | Seq. ID | OJ990405_12.9819.C19 |
| Gene No. | 45386                              | Strand  | +                    |
| Start    | 5133                               | End     | 7519                 |
| Name     | OJ990405_12.9819.C19.o1.gp         | Method  | AAT/GAP              |
| Start    | 5241                               | End     | 7029                 |
| GI       | 99213_1.R1084                      | Score   | 1032                 |
| Exons    | 5241..5390, 6094..6306, 6853..7029 |         |                      |



GI Descrip. '5734621/dbj|BAA83352.1| 5.0e-77 (AP000391) ESTs  
AU067992(C11433),AU077424(C11433) correspond to a region of the  
predicted gene.; Similar to ABC transporter-7 (U43892) [Oryza  
sativa]'

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21750  | Seq. ID | OJ990405_12.9819.C19 |
| Gene No.    | 45387  | Strand  | -                    |
| Start       | 1  | End     | 3100                 |
| Name        | OJ990405_12.9819.C19.o1.np                             | Method  | AAT/NAP              |
| Start       | 1  | End     | 3100                 |
| GI          | 6911869  | Score   | 360                  |
| Exons       | 1..128, 1517..1621, 1966..2057, 2748..2846, 2971..3100 |         |                      |
| GI Descrip. | (AL138655) putative protein [Arabidopsis thaliana]     |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21751   | Seq. ID | OJ990405_12.9819.C20 |
| Gene No.    | 45388   | Strand  | +                    |
| Start       | 137   | End     | 390                  |
| Name        | OJ990405_12.9819.C20.o1.gp  | Method  | AAT/GAP              |
| Start       | 137   | End     | 390                  |
| GI          | 12948_1.R1084   | Score   | 249                  |
| Exons       | 137..224, 316..390  |         |                      |
| GI Descrip. | '5734616/dbj AP000391.1 AP000391 5.0e-95 Oryza sativa genomic<br>DNA, chromosome 6, clone:P0538C01' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21751                      | Seq. ID | OJ990405_12.9819.C20 |
| Gene No. | 45389                      | Strand  | +                    |
| Start    | 316                        | End     | 390                  |
| Name     | OJ990405_12.9819.C20.o1.gs | Method  | GENSCAN              |
| Start    | 316                        | End     | 390                  |
| GI       | none                       | Score   | .59                  |
| Exons    | 316..390                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21752  | Seq. ID | OJ990405_12.9819.C21 |
| Gene No.    | 45390  | Strand  | +                    |
| Start       | 454  | End     | 589                  |
| Name        | OJ990405_12.9819.C21.o1.gp   | Method  | AAT/GAP              |
| Start       | 454  | End     | 510                  |
| GI          | LIB3433-040-P1-K1-C8   | Score   | 91                   |
| Exons       | 454..510   |         |                      |
| GI Descrip. | '5734621/dbj BAA83352.1  2.0e-80 (AP000391) ESTs<br>AU067992(C11433),AU077424(C11433) correspond to a region of the<br>predicted gene.; Similar to ABC transporter-7 (U43892) [Oryza<br>sativa]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21752                      | Seq. ID | OJ990405_12.9819.C21 |
| Gene No. | 45390                      | Strand  | +                    |
| Start    | 454                        | End     | 589                  |
| Name     | OJ990405_12.9819.C21.o1.gs | Method  | GENSCAN              |
| Start    | 454                        | End     | 589                  |
| GI       | none                       | Score   | .83                  |
| Exons    | 454..589                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21753                      | Seq. ID | OJ990405_12.9819.C22 |
| Gene No. | 45391                      | Strand  | +                    |
| Start    | 1                          | End     | 863                  |
| Name     | OJ990405_12.9819.C22.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 863                  |

GI 6403492 Score 296  
 Exons 1..217, 304..413, 495..863  
 GI Descrip. (AC010871) unknown protein [Arabidopsis thaliana]

Seq. No. 21753 Seq. ID OJ990405\_12.9819.C22  
 Gene No. 45391 Strand +  
 Start 1 End 863  
 Name OJ990405\_12.9819.C22.ol.tm Method TBLASTX:Maize  
 Start 291 End 613  
 GI none Score 130  
 Exons 291..416, 304..414, 305..418, 472..612, 479..613

Seq. No. 21753 Seq. ID OJ990405\_12.9819.C22  
 Gene No. 45391 Strand +  
 Start 1 End 863  
 Name OJ990405\_12.9819.C22.ol.tc Method TBLASTX:Cress  
 Start 299 End 640  
 GI none Score 176  
 Exons 299..418, 304..414, 305..415, 306..431, 472..612, 479..613, 494..640

Seq. No. 21753 Seq. ID OJ990405\_12.9819.C22  
 Gene No. 45391 Strand +  
 Start 1 End 863  
 Name OJ990405\_12.9819.C22.ol.ts Method TBLASTX:Soybean  
 Start 299 End 604  
 GI none Score 174  
 Exons 299..418, 304..414, 472..603, 479..604, 494..604

Seq. No. 21753 Seq. ID OJ990405\_12.9819.C22  
 Gene No. 45391 Strand +  
 Start 1 End 863  
 Name OJ990405\_12.9819.C22.ol.gp Method AAT/GAP  
 Start 392 End 609  
 GI 53223\_1.R1084 Score 220  
 Exons 392..413, 495..609  
 GI Descrip. '5734620/dbj|BAA83351.1| 1.0e-20 (AP000391) ESTs  
 AU077435(C12539),C26534(C12539) correspond to a region of the  
 predicted gene.; hypothetical protein [Oryza sativa]'

Seq. No. 21754 Seq. ID OJ990405\_12.9819.C23  
 Gene No. 45392 Strand +  
 Start 336 End 517  
 Name OJ990405\_12.9819.C23.ol.gs Method GENSCAN  
 Start 336 End 517  
 GI none Score .89  
 Exons 336..517

Seq. No. 21755 Seq. ID OJ990305\_04.9819.C2  
 Gene No. 45393 Strand -  
 Start 331 End 762  
 Name OJ990305\_04.9819.C2.ol.np Method AAT/NAP  
 Start 331 End 762  
 GI 4680203 Score 279  
 Exons 331..762  
 GI Descrip. (AF114171) TNP2-like protein [Sorghum bicolor]

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21755  | Seq. ID | OJ990305_04.9819.C2 |
| Gene No. | 45393  | Strand  | -                   |
| Start    | 331  | End     | 762                 |
| Name     | OJ990305_04.9819.C2.o1.tw                                  | Method  | TBLASTX:Wheat       |
| Start    | 419  | End     | 739                 |
| GI       | none   | Score   | 107                 |
| Exons    | 419..475, 496..540, 549..653, 550..657, 676..735, 677..739 |         |                     |

|          |                                  |         |                     |
|----------|----------------------------------|---------|---------------------|
| Seq. No. | 21756                            | Seq. ID | OJ990305_04.9819.C4 |
| Gene No. | 45394                            | Strand  | -                   |
| Start    | 762                              | End     | 2712                |
| Name     | OJ990305_04.9819.C4.o1.gs        | Method  | GENSCAN             |
| Start    | 762                              | End     | 2653                |
| GI       | none                             | Score   | .5                  |
| Exons    | 762..800, 2235..2297, 2471..2653 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21756  | Seq. ID | OJ990305_04.9819.C4 |
| Gene No.    | 45394  | Strand  | -                   |
| Start       | 762  | End     | 2712                |
| Name        | OJ990305_04.9819.C4.o1.np                      | Method  | AAT/NAP             |
| Start       | 1031   | End     | 2712                |
| GI          | 6539588  | Score   | 220                 |
| Exons       | 1031..1055, 2397..2712                         |         |                     |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21757                     | Seq. ID | OJ990305_04.9819.C6 |
| Gene No. | 45395                     | Strand  | -                   |
| Start    | 46                        | End     | 577                 |
| Name     | OJ990305_04.9819.C6.o1.gs | Method  | GENSCAN             |
| Start    | 46                        | End     | 577                 |
| GI       | none                      | Score   | .44                 |
| Exons    | 46..577                   |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21758                     | Seq. ID | OJ990305_04.9819.C7 |
| Gene No. | 45396                     | Strand  | +                   |
| Start    | 827                       | End     | 1144                |
| Name     | OJ990305_04.9819.C7.o1.gs | Method  | GENSCAN             |
| Start    | 827                       | End     | 1144                |
| GI       | none                      | Score   | .5                  |
| Exons    | 827..978, 1093..1144      |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21758                     | Seq. ID | OJ990305_04.9819.C7 |
| Gene No. | 45397                     | Strand  | -                   |
| Start    | 1408                      | End     | 1694                |
| Name     | OJ990305_04.9819.C7.o2.gs | Method  | GENSCAN             |
| Start    | 1408                      | End     | 1694                |
| GI       | none                      | Score   | .86                 |
| Exons    | 1408..1559, 1601..1694    |         |                     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21759                      | Seq. ID | OJ990305_04.9819.C10 |
| Gene No. | 45398                      | Strand  | +                    |
| Start    | 2906                       | End     | 3029                 |
| Name     | OJ990305_04.9819.C10.o1.gs | Method  | GENSCAN              |
| Start    | 2906                       | End     | 3029                 |
| GI       | none                       | Score   | .69                  |
| Exons    | 2906..3029                 |         |                      |

|             |                                   |         |                      |
|-------------|-----------------------------------|---------|----------------------|
| Seq. No.    | 21759                             | Seq. ID | OJ990305_04.9819.C10 |
| Gene No.    | 45399                             | Strand  | -                    |
| Start       | 1                                 | End     | 2796                 |
| Name        | OJ990305_04.9819.C10.o1.np        | Method  | AAT/NAP              |
| Start       | 1                                 | End     | 2796                 |
| GI          | 5852093                           | Score   | 56                   |
| Exons       | 1..34, 1305..1411, 2745..2796     |         |                      |
| GI Descrip. | (AL117264) zwh16.1 [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21760                      | Seq. ID | OJ990305_04.9819.C11 |
| Gene No. | 45400                      | Strand  | +                    |
| Start    | 1281                       | End     | 1493                 |
| Name     | OJ990305_04.9819.C11.o1.gs | Method  | GENSCAN              |
| Start    | 1281                       | End     | 1493                 |
| GI       | none                       | Score   | .41                  |
| Exons    | 1281..1493                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21761  | Seq. ID | OJ990305_04.9819.C13 |
| Gene No.    | 45401  | Strand  | -                    |
| Start       | 1  | End     | 691                  |
| Name        | OJ990305_04.9819.C13.o1.np                               | Method  | AAT/NAP              |
| Start       | 1  | End     | 691                  |
| GI          | 3645899  | Score   | 271                  |
| Exons       | 1..691   |         |                      |
| GI Descrip. | (U68408) 5' end not determined experimentally [Zea mays] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21761                      | Seq. ID | OJ990305_04.9819.C13 |
| Gene No. | 45401                      | Strand  | -                    |
| Start    | 1                          | End     | 691                  |
| Name     | OJ990305_04.9819.C13.o1.gs | Method  | GENSCAN              |
| Start    | 44                         | End     | 688                  |
| GI       | none                       | Score   | .63                  |
| Exons    | 44..688                    |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21762  | Seq. ID | OJ990305_04.9819.C15 |
| Gene No.    | 45402  | Strand  | -                    |
| Start       | 1  | End     | 333                  |
| Name        | OJ990305_04.9819.C15.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 333                  |
| GI          | 6539585  | Score   | 92                   |
| Exons       | 1..25, 157..333                                |         |                      |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21762  | Seq. ID | OJ990305_04.9819.C15 |
| Gene No.    | 45403  | Strand  | -                    |
| Start       | 464  | End     | 574                  |
| Name        | OJ990305_04.9819.C15.o2.np                     | Method  | AAT/NAP              |
| Start       | 464  | End     | 574                  |
| GI          | 6539588  | Score   | 70                   |
| Exons       | 464..574                                       |         |                      |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21763                      | Seq. ID | OJ990305_04.9819.C17 |
| Gene No. | 45404                      | Strand  | +                    |
| Start    | 144                        | End     | 764                  |
| Name     | OJ990305_04.9819.C17.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 132                        | End     | 442                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| GI          | none  | Score   | 45                   |
| Exons       | 132..191, 145..390, 167..442  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21763   | Seq. ID | OJ990305_04.9819.C17 |
| Gene No.    | 45404   | Strand  | +                    |
| Start       | 144   | End     | 764                  |
| Name        | OJ990305_04.9819.C17.ol.tm  | Method  | TBLASTX:Maize        |
| Start       | 143   | End     | 442                  |
| GI          | none  | Score   | 45                   |
| Exons       | 143..190, 144..191, 166..420, 167..442  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21763   | Seq. ID | OJ990305_04.9819.C17 |
| Gene No.    | 45404   | Strand  | +                    |
| Start       | 144   | End     | 764                  |
| Name        | OJ990305_04.9819.C17.ol.np  | Method  | AAT/NAP              |
| Start       | 144   | End     | 764                  |
| GI          | 6016726   | Score   | 277                  |
| Exons       | 144..444, 723..764  |         |                      |
| GI Descrip. | (AC009325) unknown protein [Arabidopsis thaliana]<br>gi 6091713 gb AAF03425.1 AC010797_1 (AC010797) unknown protein<br>[Arabidopsis thaliana] |         |                      |
|             |   |         |                      |
| Seq. No.    | 21763   | Seq. ID | OJ990305_04.9819.C17 |
| Gene No.    | 45404   | Strand  | +                    |
| Start       | 144   | End     | 764                  |
| Name        | OJ990305_04.9819.C17.ol.ts  | Method  | TBLASTX:Soybean      |
| Start       | 167   | End     | 442                  |
| GI          | none  | Score   | 282                  |
| Exons       | 167..442, 178..411  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21763   | Seq. ID | OJ990305_04.9819.C17 |
| Gene No.    | 45404   | Strand  | +                    |
| Start       | 144   | End     | 764                  |
| Name        | OJ990305_04.9819.C17.ol.gs  | Method  | GENSCAN              |
| Start       | 245   | End     | 444                  |
| GI          | none  | Score   | .86                  |
| Exons       | 245..444  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21764   | Seq. ID | OJ990305_04.9819.C19 |
| Gene No.    | 45405   | Strand  | +                    |
| Start       | 212   | End     | 2089                 |
| Name        | OJ990305_04.9819.C19.ol.gs  | Method  | GENSCAN              |
| Start       | 212   | End     | 2089                 |
| GI          | none  | Score   | .52                  |
| Exons       | 212..275, 281..323, 1047..1071, 1979..2089  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21765   | Seq. ID | OJ990305_04.9819.C21 |
| Gene No.    | 45406   | Strand  | -                    |
| Start       | 66  | End     | 399                  |
| Name        | OJ990305_04.9819.C21.ol.gs  | Method  | GENSCAN              |
| Start       | 66  | End     | 399                  |
| GI          | none  | Score   | .5                   |
| Exons       | 66..139, 192..399   |         |                      |
|             |   |         |                      |
| Seq. No.    | 21766   | Seq. ID | OJ990305_04.9819.C22 |
| Gene No.    | 45407   | Strand  | +                    |
| Start       | 1123  | End     | 1249                 |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Name        | OJ990305_04.9819.C22.o1.gs  | Method  | GENSCAN              |
| Start       | 1123  | End     | 1249                 |
| GI          | none  | Score   | .54                  |
| Exons       | 1123..1249  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21767   | Seq. ID | OJ990305_04.9819.C25 |
| Gene No.    | 45408   | Strand  | +                    |
| Start       | 219   | End     | 2188                 |
| Name        | OJ990305_04.9819.C25.o1.gs  | Method  | GENSCAN              |
| Start       | 219   | End     | 2188                 |
| GI          | none  | Score   | .98                  |
| Exons       | 219..277, 1919..2057, 2096..2188  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21768   | Seq. ID | OJ990305_04.9819.C26 |
| Gene No.    | 45409   | Strand  | +                    |
| Start       | 370   | End     | 2792                 |
| Name        | OJ990305_04.9819.C26.o1.gs  | Method  | GENSCAN              |
| Start       | 370   | End     | 1904                 |
| GI          | none  | Score   | .84                  |
| Exons       | 370..646, 1587..1904  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21768   | Seq. ID | OJ990305_04.9819.C26 |
| Gene No.    | 45409   | Strand  | +                    |
| Start       | 370   | End     | 2792                 |
| Name        | OJ990305_04.9819.C26.o1.gp  | Method  | AAT/GAP              |
| Start       | 1220  | End     | 1283                 |
| GI          | 2312838   | Score   | 79                   |
| Exons       | 1220..1283  |         |                      |
| GI Descrip. | 1420932/gb U61383 ORU61383 7.0e-21 Oryza rufipogon<br>4-coumarate-CoA ligase gene, intron 1, partial sequence |         |                      |
|             |   |         |                      |
| Seq. No.    | 21768   | Seq. ID | OJ990305_04.9819.C26 |
| Gene No.    | 45409   | Strand  | +                    |
| Start       | 370   | End     | 2792                 |
| Name        | OJ990305_04.9819.C26.o2.np  | Method  | AAT/NAP              |
| Start       | 1579  | End     | 2792                 |
| GI          | 4902849   | Score   | 207                  |
| Exons       | 1579..1863, 2764..2792  |         |                      |
| GI Descrip. | (AJ006940) phosphoribosyl pyrophosphate synthase [Spinacia<br>oleracea]                                       |         |                      |
|             |   |         |                      |
| Seq. No.    | 21768   | Seq. ID | OJ990305_04.9819.C26 |
| Gene No.    | 45409   | Strand  | +                    |
| Start       | 370   | End     | 2792                 |
| Name        | OJ990305_04.9819.C26.o1.tc  | Method  | TBLASTX:Cress        |
| Start       | 1637  | End     | 1856                 |
| GI          | none  | Score   | 143                  |
| Exons       | 1637..1771, 1653..1766, 1769..1855, 1770..1856  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21768   | Seq. ID | OJ990305_04.9819.C26 |
| Gene No.    | 45409   | Strand  | +                    |
| Start       | 370   | End     | 2792                 |
| Name        | OJ990305_04.9819.C26.o1.ts  | Method  | TBLASTX:Soybean      |
| Start       | 1655  | End     | 1856                 |
| GI          | none  | Score   | 152                  |
| Exons       | 1655..1771, 1656..1766, 1769..1855, 1770..1856  |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21769  | Seq. ID | OJ990305_04.9819.C27 |
| Gene No.    | 45410  | Strand  | +                    |
| Start       | 780  | End     | 893                  |
| Name        | OJ990305_04.9819.C27.o1.gs   | Method  | GENSCAN              |
| Start       | 780  | End     | 893                  |
| GI          | none   | Score   | .43                  |
| Exons       | 780..893   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21770  | Seq. ID | OJ990305_04.9819.C29 |
| Gene No.    | 45411  | Strand  | +                    |
| Start       | 789  | End     | 2051                 |
| Name        | OJ990305_04.9819.C29.o1.gs   | Method  | GENSCAN              |
| Start       | 789  | End     | 2051                 |
| GI          | none   | Score   | .65                  |
| Exons       | 789..891, 1136..1181, 1710..2051   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21771  | Seq. ID | OJ990305_04.9819.C30 |
| Gene No.    | 45412  | Strand  | +                    |
| Start       | 1  | End     | 1857                 |
| Name        | OJ990305_04.9819.C30.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 1857                 |
| GI          | 4512666  | Score   | 443                  |
| Exons       | 1..34, 348..704, 790..948, 1084..1200, 1267..1472, 1815..1857  |         |                      |
| GI Descrip. | (AC006931) putative RNA-binding protein [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21771  | Seq. ID | OJ990305_04.9819.C30 |
| Gene No.    | 45412  | Strand  | +                    |
| Start       | 1  | End     | 1857                 |
| Name        | OJ990305_04.9819.C30.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 283  | End     | 870                  |
| GI          | none   | Score   | 189                  |
| Exons       | 283..447, 291..446, 409..564, 412..564, 417..569, 567..701, 569..703, 570..686, 572..703, 613..711, 787..870, 796..864 |         |                      |
|             |  |         |                      |
| Seq. No.    | 21771  | Seq. ID | OJ990305_04.9819.C30 |
| Gene No.    | 45412  | Strand  | +                    |
| Start       | 1  | End     | 1857                 |
| Name        | OJ990305_04.9819.C30.o1.gs   | Method  | GENSCAN              |
| Start       | 286  | End     | 1415                 |
| GI          | none   | Score   | .76                  |
| Exons       | 286..704, 790..948, 1267..1415   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21771  | Seq. ID | OJ990305_04.9819.C30 |
| Gene No.    | 45412  | Strand  | +                    |
| Start       | 1  | End     | 1857                 |
| Name        | OJ990305_04.9819.C30.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 339  | End     | 1386                 |
| GI          | none   | Score   | 121                  |
| Exons       | 339..455, 376..507, 382..492, 608..703, 609..686, 781..951, 787..948, 1081..1206, 1264..1386                           |         |                      |
|             |  |         |                      |
| Seq. No.    | 21771  | Seq. ID | OJ990305_04.9819.C30 |
| Gene No.    | 45412  | Strand  | +                    |
| Start       | 1  | End     | 1857                 |
| Name        | OJ990305_04.9819.C30.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 847  | End     | 1413                 |
| GI          | none   | Score   | 126                  |

Exons 847..948, 848..949, 1068..1199, 1069..1206, 1264..1413

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21771  | Seq. ID | OJ990305_04.9819.C30 |
| Gene No. | 45412  | Strand  | +                    |
| Start    | 1  | End     | 1857                 |
| Name     | OJ990305_04.9819.C30.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 875  | End     | 1420                 |
| GI       | none   | Score   | 95                   |
| Exons    | 875..949, 877..948, 927..953, 1077..1205, 1078..1206, 1081..1209, 1264..1413, 1264..1410, 1265..1420 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21772   | Seq. ID | OJ990305_04.9819.C31 |
| Gene No. | 45413   | Strand  | +                    |
| Start    | 1   | End     | 2273                 |
| Name     | OJ990305_04.9819.C31.o1.np  | Method  | AAT/NAP              |
| Start    | 1   | End     | 2273                 |
| GI       | 2443329   | Score   | 510                  |
| Exons    | 1..27, 261..352, 380..684, 1026..1656, 1755..1839, 1937..2005, 2226..2273 |         |                      |

GI Descrip. (D86122) Mei2-like protein [Arabidopsis thaliana]

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21772   | Seq. ID | OJ990305_04.9819.C31 |
| Gene No. | 45413   | Strand  | +                    |
| Start    | 1   | End     | 2273                 |
| Name     | OJ990305_04.9819.C31.o3.tm                    | Method  | TBLASTX:Maize        |
| Start    | 73  | End     | 400                  |
| GI       | none  | Score   | 122                  |
| Exons    | 73..168, 75..167, 78..170, 244..399, 245..400 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21772                      | Seq. ID | OJ990305_04.9819.C31 |
| Gene No. | 45413                      | Strand  | +                    |
| Start    | 1                          | End     | 2273                 |
| Name     | OJ990305_04.9819.C31.o1.gs | Method  | GENSCAN              |
| Start    | 212                        | End     | 1566                 |
| GI       | none                       | Score   | .62                  |
| Exons    | 212..698, 1001..1566       |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21772   | Seq. ID | OJ990305_04.9819.C31 |
| Gene No.    | 45413   | Strand  | +                    |
| Start       | 1   | End     | 2273                 |
| Name        | OJ990305_04.9819.C31.o1.gp  | Method  | AAT/GAP              |
| Start       | 372   | End     | 1264                 |
| GI          | 35138_1.R1084   | Score   | 1142                 |
| Exons       | 372..698, 1001..1264  |         |                      |
| GI Descrip. | '5091496/dbj AB023482.2 AB023482 2.0e-55 Oryza sativa genomic DNA, chromosome 6, clone P0680A03, complete sequence' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21772  | Seq. ID | OJ990305_04.9819.C31 |
| Gene No. | 45413  | Strand  | +                    |
| Start    | 1  | End     | 2273                 |
| Name     | OJ990305_04.9819.C31.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 455  | End     | 2026                 |
| GI       | none   | Score   | 76                   |
| Exons    | 455..598, 1051..1149, 1216..1377, 1221..1343, 1444..1500, 1568..1657, 1568..1669, 1750..1839, 1752..1838, 1765..1839, 1930..1998, 1931..2005, 1931..2026 |         |                      |



|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21772                        | Seq. ID | OJ990305_04.9819.C31 |
| Gene No. | 45413                        | Strand  | +                    |
| Start    | 1                            | End     | 2273                 |
| Name     | OJ990305_04.9819.C31.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 477                          | End     | 690                  |
| GI       | none                         | Score   | 301                  |
| Exons    | 477..689, 479..688, 556..690 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21772  | Seq. ID | OJ990305_04.9819.C31 |
| Gene No. | 45413  | Strand  | +                    |
| Start    | 1  | End     | 2273                 |
| Name     | OJ990305_04.9819.C31.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1237   | End     | 2026                 |
| GI       | none   | Score   | 315                  |
| Exons    | 1237..1455, 1239..1445, 1243..1452, 1245..1463, 1447..1533, 1449..1562, 1449..1562, 1450..1563, 1562..1660, 1564..1653, 1565..1657, 1750..1839, 1752..1838, 1756..1839, 1931..2005, 1931..2026 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21772  | Seq. ID | OJ990305_04.9819.C31 |
| Gene No. | 45413  | Strand  | +                    |
| Start    | 1  | End     | 2273                 |
| Name     | OJ990305_04.9819.C31.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 1282   | End     | 1674                 |
| GI       | none   | Score   | 100                  |
| Exons    | 1282..1398, 1311..1397, 1444..1491, 1501..1551, 1565..1657, 1621..1674 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21772   | Seq. ID | OJ990305_04.9819.C31 |
| Gene No.    | 45413   | Strand  | +                    |
| Start       | 1   | End     | 2273                 |
| Name        | OJ990305_04.9819.C31.o2.gp  | Method  | AAT/GAP              |
| Start       | 1514  | End     | 2005                 |
| GI          | 2427568   | Score   | 513                  |
| Exons       | 1514..1656, 1755..1839, 1937..2005  |         |                      |
| GI Descrip. | 2443329/dbj BAA22374  4.0e-52 (D86122) Mei2-like protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21772  | Seq. ID | OJ990305_04.9819.C31 |
| Gene No. | 45413  | Strand  | +                    |
| Start    | 1  | End     | 2273                 |
| Name     | OJ990305_04.9819.C31.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1519   | End     | 2007                 |
| GI       | none   | Score   | 44                   |
| Exons    | 1519..1560, 1562..1657, 1565..1669, 1750..1839, 1752..1838, 1765..1839, 1930..2001, 1931..2005, 1935..2006, 1936..2007 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21773   | Seq. ID | OJ990305_04.9819.C32 |
| Gene No.    | 45414   | Strand  | +                    |
| Start       | 12  | End     | 1279                 |
| Name        | OJ990305_04.9819.C32.o1.gp  | Method  | AAT/GAP              |
| Start       | 12  | End     | 1279                 |
| GI          | 10774_1.R1084   | Score   | 1549                 |
| Exons       | 12..49, 483..1279   |         |                      |
| GI Descrip. | '2443329/dbj BAA22374  5.0e-63 (D86122) Mei2-like protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21773  | Seq. ID | OJ990305_04.9819.C32 |
| Gene No. | 45415  | Strand  | -                    |
| Start    | 452  | End     | 2831                 |
| Name     | OJ990305_04.9819.C32.o1.gs   | Method  | GENSCAN              |
| Start    | 452  | End     | 2831                 |
| GI       | none   | Score   | .47                  |
| Exons    | 452..493, 888..1006, 2139..2653, 2665..2831  |         |                      |
|          |  |         |                      |
| Seq. No. | 21773  | Seq. ID | OJ990305_04.9819.C32 |
| Gene No. | 45415  | Strand  | -                    |
| Start    | 452  | End     | 2831                 |
| Name     | OJ990305_04.9819.C32.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 455  | End     | 1189                 |
| GI       | none   | Score   | 141                  |
| Exons    | 455..631, 479..631, 480..632, 484..633, 650..688, 758..790, 760..846, 784..804, 856..924, 858..923, 897..926, 914..952, 921..956, 922..957, 964..1002, 968..1003, 969..1001, 970..1014, 1051..1077, 1052..1078, 1060..1173, 1064..1189, 1085..1168 |         |                      |
|          |  |         |                      |
| Seq. No. | 21774  | Seq. ID | OJ990305_04.9819.C33 |
| Gene No. | 45416  | Strand  | +                    |
| Start    | 180  | End     | 416                  |
| Name     | OJ990305_04.9819.C33.o1.gp   | Method  | AAT/GAP              |
| Start    | 180  | End     | 416                  |
| GI       | none   | Score   | 451                  |
| Exons    | 180..416   |         |                      |
|          |  |         |                      |
| Seq. No. | 21774  | Seq. ID | OJ990305_04.9819.C33 |
| Gene No. | 45416  | Strand  | +                    |
| Start    | 180  | End     | 416                  |
| Name     | OJ990305_04.9819.C33.o1.gs   | Method  | GENSCAN              |
| Start    | 315  | End     | 416                  |
| GI       | none   | Score   | .87                  |
| Exons    | 315..416   |         |                      |
|          |  |         |                      |
| Seq. No. | 21775  | Seq. ID | OJ990305_04.9819.C34 |
| Gene No. | 45417  | Strand  | +                    |
| Start    | 253  | End     | 500                  |
| Name     | OJ990305_04.9819.C34.o1.gp   | Method  | AAT/GAP              |
| Start    | 253  | End     | 500                  |
| GI       | none   | Score   | 436                  |
| Exons    | 253..500   |         |                      |
|          |  |         |                      |
| Seq. No. | 21775  | Seq. ID | OJ990305_04.9819.C34 |
| Gene No. | 45417  | Strand  | +                    |
| Start    | 253  | End     | 500                  |
| Name     | OJ990305_04.9819.C34.o1.gs   | Method  | GENSCAN              |
| Start    | 388  | End     | 489                  |
| GI       | none   | Score   | .93                  |
| Exons    | 388..489   |         |                      |
|          |  |         |                      |
| Seq. No. | 21776  | Seq. ID | OJ990305_04.9819.C37 |
| Gene No. | 45418  | Strand  | -                    |
| Start    | 3707   | End     | 4267                 |
| Name     | OJ990305_04.9819.C37.o2.gs   | Method  | GENSCAN              |
| Start    | 3707   | End     | 4267                 |
| GI       | none   | Score   | .79                  |

Exons 3707..4267

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21777                      | Seq. ID | OJ990305_04.9819.C38 |
| Gene No. | 45419                      | Strand  | +                    |
| Start    | 1151                       | End     | 1320                 |
| Name     | OJ990305_04.9819.C38.o1.gs | Method  | GENSCAN              |
| Start    | 1151                       | End     | 1320                 |
| GI       | none                       | Score   | .46                  |
| Exons    | 1151..1320                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21777                      | Seq. ID | OJ990305_04.9819.C38 |
| Gene No. | 45420                      | Strand  | -                    |
| Start    | 2440                       | End     | 4424                 |
| Name     | OJ990305_04.9819.C38.o2.gs | Method  | GENSCAN              |
| Start    | 2440                       | End     | 4424                 |
| GI       | none                       | Score   | .72                  |
| Exons    | 2440..2656, 4405..4424     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21778  | Seq. ID | OJ990305_04.9819.C39 |
| Gene No.    | 45421  | Strand  | -                    |
| Start       | 1  | End     | 2223                 |
| Name        | OJ990305_04.9819.C39.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 2223                 |
| GI          | 4680203  | Score   | 905                  |
| Exons       | 1..948, 2170..2223                             |         |                      |
| GI Descrip. | (AF114171) TNP2-like protein [Sorghum bicolor] |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21778                        | Seq. ID | OJ990305_04.9819.C39 |
| Gene No. | 45421                        | Strand  | -                    |
| Start    | 1                            | End     | 2223                 |
| Name     | OJ990305_04.9819.C39.o1.gs   | Method  | GENSCAN              |
| Start    | 140                          | End     | 948                  |
| GI       | none                         | Score   | .67                  |
| Exons    | 140..565, 589..727, 827..948 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21778                      | Seq. ID | OJ990305_04.9819.C39 |
| Gene No. | 45421                      | Strand  | -                    |
| Start    | 1                          | End     | 2223                 |
| Name     | OJ990305_04.9819.C39.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 188                        | End     | 475                  |
| GI       | none                       | Score   | 100                  |
| Exons    | 188..475, 261..437         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21778  | Seq. ID | OJ990305_04.9819.C39 |
| Gene No. | 45421  | Strand  | -                    |
| Start    | 1  | End     | 2223                 |
| Name     | OJ990305_04.9819.C39.o1.tw                       | Method  | TBLASTX:Wheat        |
| Start    | 239  | End     | 595                  |
| GI       | none   | Score   | 213                  |
| Exons    | 239..508, 246..500, 247..507, 491..595, 505..570 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21779                      | Seq. ID | OJ990305_04.9819.C41 |
| Gene No. | 45422                      | Strand  | +                    |
| Start    | 1                          | End     | 1306                 |
| Name     | OJ990305_04.9819.C41.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 1270                 |
| GI       | 3152568                    | Score   | 1005                 |

Exons 1..1270  
 GI Descrip. (AC002986) Similar to hypothetical protein product gb|Z97337 from A. thaliana. EST gb|H76597 comes from this gene. [Arabidopsis thaliana]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21779                      | Seq. ID | OJ990305_04.9819.C41 |
| Gene No. | 45422                      | Strand  | +                    |
| Start    | 1                          | End     | 1306                 |
| Name     | OJ990305_04.9819.C41.o1.gs | Method  | GENSCAN              |
| Start    | 77                         | End     | 1306                 |
| GI       | none                       | Score   | .9                   |
| Exons    | 77..1306                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21779  | Seq. ID | OJ990305_04.9819.C41 |
| Gene No. | 45423  | Strand  | -                    |
| Start    | 1211   | End     | 1722                 |
| Name     | OJ990305_04.9819.C41.o1.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 59   | End     | 529                  |
| GI       | none   | Score   | 278                  |
| Exons    | 59..322, 61..321, 330..467, 362..529, 368..523 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21779  | Seq. ID | OJ990305_04.9819.C41 |
| Gene No. | 45423  | Strand  | -                    |
| Start    | 1211   | End     | 1722                 |
| Name     | OJ990305_04.9819.C41.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 107  | End     | 1556                 |
| GI       | none   | Score   | 167                  |
| Exons    | 107..235, 116..232, 236..1306, 240..584, 241..1317, 242..1306, 930..1316, 1383..1406, 1389..1409, 1479..1514, 1539..1556 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21779  | Seq. ID | OJ990305_04.9819.C41 |
| Gene No. | 45423  | Strand  | -                    |
| Start    | 1211   | End     | 1722                 |
| Name     | OJ990305_04.9819.C41.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 113  | End     | 757                  |
| GI       | none   | Score   | 221                  |
| Exons    | 113..322, 115..321, 236..361, 322..399, 362..580, 487..579, 598..756, 599..757 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21779                      | Seq. ID | OJ990305_04.9819.C41 |
| Gene No. | 45423                      | Strand  | -                    |
| Start    | 1211                       | End     | 1722                 |
| Name     | OJ990305_04.9819.C41.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 698                        | End     | 955                  |
| GI       | none                       | Score   | 318                  |
| Exons    | 698..955, 700..954         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21779                      | Seq. ID | OJ990305_04.9819.C41 |
| Gene No. | 45423                      | Strand  | -                    |
| Start    | 1211                       | End     | 1722                 |
| Name     | OJ990305_04.9819.C41.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 1072                       | End     | 1288                 |
| GI       | none                       | Score   | 225                  |
| Exons    | 1072..1284, 1073..1288     |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21779 | Seq. ID | OJ990305_04.9819.C41 |
| Gene No. | 45423 | Strand  | -                    |

Start 1211  
 Name OJ990305\_04.9819.C41.ol.gp  
 Start 1211  
 GI none  
 Exons 1211..1722

End 1722  
 Method AAT/GAP  
 End 1722  
 Score 919

Seq. No. 21780  
 Gene No. 45424  
 Start 536  
 Name OJ990305\_04.9819.C42.ol.gs  
 Start 536  
 GI none  
 Exons 536..676

Seq. ID OJ990305\_04.9819.C42  
 Strand -  
 End 676  
 Method GENSCAN  
 End 676  
 Score .73

Seq. No. 21781  
 Gene No. 45425  
 Start 182  
 Name OJ990305\_04.9819.C45.ol.gs  
 Start 182  
 GI none  
 Exons 182..439

Seq. ID OJ990305\_04.9819.C45  
 Strand +  
 End 439  
 Method GENSCAN  
 End 439  
 Score .97

Seq. No. 21781  
 Gene No. 45425  
 Start 182  
 Name OJ990305\_04.9819.C45.ol.np  
 Start 185  
 GI 2459437  
 Exons 185..436

Seq. ID OJ990305\_04.9819.C45  
 Strand +  
 End 439  
 Method AAT/NAP  
 End 436  
 Score 177

GI Descrip. (AC002332) hypothetical protein [Arabidopsis thaliana]

Seq. No. 21782  
 Gene No. 45426  
 Start 1  
 Name OJ990305\_04.9819.C46.ol.np  
 Start 1  
 GI 1402890  
 Exons 1..21, 1089..1853

Seq. ID OJ990305\_04.9819.C46  
 Strand +  
 End 2721  
 Method AAT/NAP  
 End 1853  
 Score 729

GI Descrip. (X98130) unknown [Arabidopsis thaliana]

Seq. No. 21782  
 Gene No. 45426  
 Start 1  
 Name OJ990305\_04.9819.C46.ol.gp  
 Start 702  
 GI none  
 Exons 702..751, 876..1063

Seq. ID OJ990305\_04.9819.C46  
 Strand +  
 End 2721  
 Method AAT/GAP  
 End 1063  
 Score 420

Seq. No. 21782  
 Gene No. 45426  
 Start 1  
 Name OJ990305\_04.9819.C46.ol.gs  
 Start 855  
 GI none  
 Exons 855..2129, 2216..2304, 2601..2718

Seq. ID OJ990305\_04.9819.C46  
 Strand +  
 End 2721  
 Method GENSCAN  
 End 2718  
 Score .61

Seq. No. 21782

Seq. ID OJ990305\_04.9819.C46

|          |  |        |                 |
|----------|--|--------|-----------------|
| Gene No. | 45426  | Strand | +               |
| Start    | 1  | End    | 2721            |
| Name     | OJ990305_04.9819.C46.o2.ts   | Method | TBLASTX:Soybean |
| Start    | 1071   | End    | 1335            |
| GI       | none   | Score  | 131             |
| Exons    | 1071..1205, 1097..1204, 1155..1334, 1189..1335, 1189..1326, 1191..1334 |        |                 |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21782                              | Seq. ID | OJ990305_04.9819.C46 |
| Gene No. | 45426                              | Strand  | +                    |
| Start    | 1                                  | End     | 2721                 |
| Name     | OJ990305_04.9819.C46.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 1239                               | End     | 1502                 |
| GI       | none                               | Score   | 454                  |
| Exons    | 1239..1502, 1240..1494, 1242..1502 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21782   | Seq. ID | OJ990305_04.9819.C46 |
| Gene No.    | 45426   | Strand  | +                    |
| Start       | 1   | End     | 2721                 |
| Name        | OJ990305_04.9819.C46.o2.gp  | Method  | AAT/GAP              |
| Start       | 1283  | End     | 1824                 |
| GI          | LIB3477-007-P1-K1-E7  | Score   | 1036                 |
| Exons       | 1283..1824  |         |                      |
| GI Descrip. | '1402890/emb CAA66822  1.0e-56 (X98130) unknown [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21782  | Seq. ID | OJ990305_04.9819.C46 |
| Gene No. | 45426  | Strand  | +                    |
| Start    | 1  | End     | 2721                 |
| Name     | OJ990305_04.9819.C46.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1335   | End     | 2721                 |
| GI       | none   | Score   | 410                  |
| Exons    | 1335..1655, 1335..1595, 1337..1657, 1649..1858, 1650..1862, 1729..1866, 2213..2311, 2214..2294, 2221..2310, 2602..2721, 2613..2711 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21782  | Seq. ID | OJ990305_04.9819.C46 |
| Gene No. | 45426  | Strand  | +                    |
| Start    | 1  | End     | 2721                 |
| Name     | OJ990305_04.9819.C46.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1503   | End     | 2718                 |
| GI       | none   | Score   | 171                  |
| Exons    | 1503..1649, 1505..1666, 1506..1667, 1628..1780, 1641..1787, 1650..1793, 1730..1966, 1773..1973, 1782..1979, 1783..1974, 1783..1980, 1974..2090, 1976..2131, 1977..2132, 2203..2301, 2213..2305, 2214..2300, 2215..2304, 2596..2718, 2604..2714, 2605..2718 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21783  | Seq. ID | OJ990305_04.9819.C47 |
| Gene No.    | 45427  | Strand  | +                    |
| Start       | 1165   | End     | 1223                 |
| Name        | OJ990305_04.9819.C47.o1.gp   | Method  | AAT/GAP              |
| Start       | 1165   | End     | 1223                 |
| GI          | 31452_1.R1084  | Score   | 79                   |
| Exons       | 1165..1223   |         |                      |
| GI Descrip. | '2244855/emb CAB10277.1  5.0e-09 (Z97337) hypothetical protein [Arabidopsis thaliana]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21784   | Seq. ID | OJ990305_04.9819.C48 |
| Gene No.    | 45428   | Strand  | +                    |
| Start       | 1   | End     | 1462                 |
| Name        | OJ990305_04.9819.C48.o2.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1462                 |
| GI          | 3152568   | Score   | 553                  |
| Exons       | 1..36, 260..1462  |         |                      |
| GI Descrip. | (AC002986) Similar to hypothetical protein product gb Z97337 from A. thaliana. EST gb H76597 comes from this gene. [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21784  | Seq. ID | OJ990305_04.9819.C48 |
| Gene No.    | 45428  | Strand  | +                    |
| Start       | 1  | End     | 1462                 |
| Name        | OJ990305_04.9819.C48.o1.np                           | Method  | AAT/NAP              |
| Start       | 251  | End     | 1462                 |
| GI          | 2244855  | Score   | 462                  |
| Exons       | 251..916, 968..1462                                  |         |                      |
| GI Descrip. | (Z97337) hypothetical protein [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21784  | Seq. ID | OJ990305_04.9819.C48 |
| Gene No.    | 45428  | Strand  | +                    |
| Start       | 1  | End     | 1462                 |
| Name        | OJ990305_04.9819.C48.o1.gp   | Method  | AAT/GAP              |
| Start       | 260  | End     | 823                  |
| GI          | 31452_1.R1084  | Score   | 1047                 |
| Exons       | 260..823   |         |                      |
| GI Descrip. | '2244855/emb CAB10277.1  5.0e-09 (Z97337) hypothetical protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21784  | Seq. ID | OJ990305_04.9819.C48 |
| Gene No. | 45428  | Strand  | +                    |
| Start    | 1  | End     | 1462                 |
| Name     | OJ990305_04.9819.C48.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 289  | End     | 560                  |
| GI       | none   | Score   | 98                   |
| Exons    | 289..384, 302..364, 328..396, 328..456, 357..398, 391..465, 395..499, 395..499, 396..500, 396..503, 421..465, 425..496, 470..550, 473..559, 505..558, 505..549, 507..560 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21784  | Seq. ID | OJ990305_04.9819.C48 |
| Gene No. | 45428  | Strand  | +                    |
| Start    | 1  | End     | 1462                 |
| Name     | OJ990305_04.9819.C48.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 859  | End     | 1434                 |
| GI       | none   | Score   | 73                   |
| Exons    | 859..948, 938..1051, 950..1027, 959..1186, 983..1186, 993..1199, 997..1203, 1126..1434, 1206..1433 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21784  | Seq. ID | OJ990305_04.9819.C48 |
| Gene No. | 45428  | Strand  | +                    |
| Start    | 1  | End     | 1462                 |
| Name     | OJ990305_04.9819.C48.o1.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 1048   | End     | 1461                 |
| GI       | none   | Score   | 307                  |
| Exons    | 1048..1359, 1049..1186, 1050..1358, 1359..1448, 1399..1461 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21784  | Seq. ID | OJ990305_04.9819.C48 |
| Gene No. | 45428  | Strand  | +                    |
| Start    | 1  | End     | 1462                 |
| Name     | OJ990305_04.9819.C48.o1.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 1150   | End     | 1461                 |
| GI       | none   | Score   | 206                  |
| Exons    | 1150..1359, 1152..1358, 1273..1398, 1359..1460, 1399..1461 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21785  | Seq. ID | OJ990305_04.9819.C50 |
| Gene No.    | 45429  | Strand  | +                    |
| Start       | 1  | End     | 837                  |
| Name        | OJ990305_04.9819.C50.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 837                  |
| GI          | 4680203  | Score   | 838                  |
| Exons       | 1..837   |         |                      |
| GI Descrip. | (AF114171) TNP2-like protein [Sorghum bicolor] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21785                      | Seq. ID | OJ990305_04.9819.C50 |
| Gene No. | 45429                      | Strand  | +                    |
| Start    | 1                          | End     | 837                  |
| Name     | OJ990305_04.9819.C50.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 169                        | End     | 438                  |
| GI       | none                       | Score   | 222                  |
| Exons    | 169..438, 192..425         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21785                                  | Seq. ID | OJ990305_04.9819.C50 |
| Gene No. | 45429                                  | Strand  | +                    |
| Start    | 1                                      | End     | 837                  |
| Name     | OJ990305_04.9819.C50.o1.tc             | Method  | TBLASTX:Cress        |
| Start    | 177                                    | End     | 519                  |
| GI       | none                                   | Score   | 306                  |
| Exons    | 177..230, 178..519, 270..323, 369..515 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21785                                  | Seq. ID | OJ990305_04.9819.C50 |
| Gene No. | 45429                                  | Strand  | +                    |
| Start    | 1                                      | End     | 837                  |
| Name     | OJ990305_04.9819.C50.o1.tm             | Method  | TBLASTX:Maize        |
| Start    | 178                                    | End     | 566                  |
| GI       | none                                   | Score   | 69                   |
| Exons    | 178..267, 190..267, 283..564, 306..566 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21785                      | Seq. ID | OJ990305_04.9819.C50 |
| Gene No. | 45429                      | Strand  | +                    |
| Start    | 1                          | End     | 837                  |
| Name     | OJ990305_04.9819.C50.o1.gs | Method  | GENSCAN              |
| Start    | 265                        | End     | 624                  |
| GI       | none                       | Score   | .5                   |
| Exons    | 265..624                   |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21785   | Seq. ID | OJ990305_04.9819.C50 |
| Gene No. | 45429   | Strand  | +                    |
| Start    | 1   | End     | 837                  |
| Name     | OJ990305_04.9819.C50.o1.tw                                  | Method  | TBLASTX:Wheat        |
| Start    | 307   | End     | 729                  |
| GI       | none  | Score   | 67                   |
| Exons    | 307..363, 307..351, 315..359, 360..461, 361..465, 469..567, |         |                      |



474..566, 480..569, 547..729, 570..728

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21786  | Seq. ID | OJ990305_04.9819.C51 |
| Gene No.    | 45430  | Strand  | +                    |
| Start       | 1  | End     | 2075                 |
| Name        | OJ990305_04.9819.C51.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 1393                 |
| GI          | 2281094  | Score   | 186                  |
| Exons       | 1..352, 1370..1393   |         |                      |
| GI Descrip. | (AC002333) putative molybdopterin synthase large subunit [Arabidopsis thaliana] gi 4469121 emb CAB38428  (AJ133519) molybdopterin synthase large subunit [Arabidopsis thaliana] gi 6899949 emb CAB71291.1  (AJ271728) molybdopterin synthase, large subunit [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21786                      | Seq. ID | OJ990305_04.9819.C51 |
| Gene No. | 45430                      | Strand  | +                    |
| Start    | 1                          | End     | 2075                 |
| Name     | OJ990305_04.9819.C51.o1.gs | Method  | GENSCAN              |
| Start    | 4                          | End     | 2075                 |
| GI       | none                       | Score   | .43                  |
| Exons    | 4..337, 2068..2075         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21787                      | Seq. ID | OJ990305_04.9819.C52 |
| Gene No. | 45431                      | Strand  | +                    |
| Start    | 144                        | End     | 329                  |
| Name     | OJ990305_04.9819.C52.o1.gs | Method  | GENSCAN              |
| Start    | 144                        | End     | 329                  |
| GI       | none                       | Score   | .74                  |
| Exons    | 144..329                   |         |                      |

|          |                                |         |                      |
|----------|--------------------------------|---------|----------------------|
| Seq. No. | 21788                          | Seq. ID | OJ990305_04.9819.C53 |
| Gene No. | 45432                          | Strand  | +                    |
| Start    | 112                            | End     | 1117                 |
| Name     | OJ990305_04.9819.C53.o1.gs     | Method  | GENSCAN              |
| Start    | 112                            | End     | 1117                 |
| GI       | none                           | Score   | .53                  |
| Exons    | 112..242, 551..716, 1094..1117 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21788                              | Seq. ID | OJ990305_04.9819.C53 |
| Gene No. | 45433                              | Strand  | -                    |
| Start    | 2928                               | End     | 4055                 |
| Name     | OJ990305_04.9819.C53.o2.gs         | Method  | GENSCAN              |
| Start    | 2928                               | End     | 4055                 |
| GI       | none                               | Score   | .53                  |
| Exons    | 2928..3047, 3087..3269, 4026..4055 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21789  | Seq. ID | OJ990305_04.9819.C54 |
| Gene No.    | 45434  | Strand  | -                    |
| Start       | 1  | End     | 260                  |
| Name        | OJ990305_04.9819.C54.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 260                  |
| GI          | 5042448  | Score   | 165                  |
| Exons       | 1..260   |         |                      |
| GI Descrip. | (AC007789) putative ORF0 protein of RIRE8B gypsy-type retrotransposon [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21790  | Seq. ID | OJ990305_04.9819.C55 |
| Gene No.    | 45435  | Strand  | +                    |
| Start       | 3684   | End     | 4434                 |
| Name        | OJ990305_04.9819.C55.o1.gs   | Method  | GENSCAN              |
| Start       | 3684   | End     | 4434                 |
| GI          | none   | Score   | .74                  |
| Exons       | 3684..3753, 4107..4273, 4306..4434   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21790  | Seq. ID | OJ990305_04.9819.C55 |
| Gene No.    | 45435  | Strand  | +                    |
| Start       | 3684   | End     | 4434                 |
| Name        | OJ990305_04.9819.C55.o1.gp   | Method  | AAT/GAP              |
| Start       | 4181   | End     | 4273                 |
| GI          | 31452_1.R1084  | Score   | 140                  |
| Exons       | 4181..4273   |         |                      |
| GI Descrip. | '2244855/emb CAB10277.1  5.0e-09 (Z97337) hypothetical protein [Arabidopsis thaliana]' |         |                      |
|             |  |         |                      |
| Seq. No.    | 21791  | Seq. ID | OJ990305_04.9819.C56 |
| Gene No.    | 45436  | Strand  | -                    |
| Start       | 1152   | End     | 3775                 |
| Name        | OJ990305_04.9819.C56.o1.gs   | Method  | GENSCAN              |
| Start       | 1152   | End     | 3775                 |
| GI          | none   | Score   | .89                  |
| Exons       | 1152..1779, 1862..3016, 3122..3375, 3601..3775   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21791  | Seq. ID | OJ990305_04.9819.C56 |
| Gene No.    | 45436  | Strand  | -                    |
| Start       | 1152   | End     | 3775                 |
| Name        | OJ990305_04.9819.C56.o1.np   | Method  | AAT/NAP              |
| Start       | 1170   | End     | 3766                 |
| GI          | 4063770  | Score   | 1876                 |
| Exons       | 1170..1780, 1860..3016, 3122..3766   |         |                      |
| GI Descrip. | (AB004906) transposase [Ipomoea purpurea]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21791  | Seq. ID | OJ990305_04.9819.C56 |
| Gene No.    | 45436  | Strand  | -                    |
| Start       | 1152   | End     | 3775                 |
| Name        | OJ990305_04.9819.C56.o2.tm   | Method  | TBLASTX:Maize        |
| Start       | 1242   | End     | 1559                 |
| GI          | none   | Score   | 74                   |
| Exons       | 1242..1559, 1243..1401   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21791  | Seq. ID | OJ990305_04.9819.C56 |
| Gene No.    | 45436  | Strand  | -                    |
| Start       | 1152   | End     | 3775                 |
| Name        | OJ990305_04.9819.C56.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 2212   | End     | 2607                 |
| GI          | none   | Score   | 81                   |
| Exons       | 2212..2289, 2299..2607, 2440..2577   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21792  | Seq. ID | OJ990305_04.9819.C57 |
| Gene No.    | 45437  | Strand  | -                    |
| Start       | 20   | End     | 252                  |
| Name        | OJ990305_04.9819.C57.o1.gs   | Method  | GENSCAN              |
| Start       | 20   | End     | 252                  |
| GI          | none   | Score   | .6                   |

Exons 20..252

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21793                      | Seq. ID | OJ990305_04.9819.C59 |
| Gene No. | 45438                      | Strand  | -                    |
| Start    | 972                        | End     | 1128                 |
| Name     | OJ990305_04.9819.C59.o1.gs | Method  | GENSCAN              |
| Start    | 972                        | End     | 1128                 |
| GI       | none                       | Score   | .4                   |
| Exons    | 972..1128                  |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21794                              | Seq. ID | OJ990305_04.9819.C60 |
| Gene No. | 45439                              | Strand  | -                    |
| Start    | 4336                               | End     | 6728                 |
| Name     | OJ990305_04.9819.C60.o2.gs         | Method  | GENSCAN              |
| Start    | 4336                               | End     | 6728                 |
| GI       | none                               | Score   | .44                  |
| Exons    | 4336..4508, 5063..5200, 6662..6728 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21795                      | Seq. ID | OJ990305_04.9819.C62 |
| Gene No. | 45440                      | Strand  | -                    |
| Start    | 160                        | End     | 582                  |
| Name     | OJ990305_04.9819.C62.o1.gs | Method  | GENSCAN              |
| Start    | 160                        | End     | 582                  |
| GI       | none                       | Score   | .71                  |
| Exons    | 160..295, 491..582         |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21796                              | Seq. ID | OJ990305_04.9819.C63 |
| Gene No. | 45441                              | Strand  | +                    |
| Start    | 1098                               | End     | 3364                 |
| Name     | OJ990305_04.9819.C63.o1.gs         | Method  | GENSCAN              |
| Start    | 1098                               | End     | 3364                 |
| GI       | none                               | Score   | .4                   |
| Exons    | 1098..1345, 2923..3048, 3145..3364 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21796  | Seq. ID | OJ990305_04.9819.C63 |
| Gene No.    | 45441  | Strand  | +                    |
| Start       | 1098   | End     | 3364                 |
| Name        | OJ990305_04.9819.C63.o1.np   | Method  | AAT/NAP              |
| Start       | 1768   | End     | 1854                 |
| GI          | 6630699  | Score   | 88                   |
| Exons       | 1768..1854   |         |                      |
| GI Descrip. | (AP000969) hypothetical protein [Oryza sativa]<br>gi 6721536 dbj BAA89566.1  (AP001073) hypothetical protein<br>[Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21797  | Seq. ID | OJ990305_04.9819.C65 |
| Gene No.    | 45442  | Strand  | +                    |
| Start       | 870  | End     | 1255                 |
| Name        | OJ990305_04.9819.C65.o1.np   | Method  | AAT/NAP              |
| Start       | 870  | End     | 1255                 |
| GI          | 141279   | Score   | 115                  |
| Exons       | 870..1010, 1171..1255  |         |                      |
| GI Descrip. | HYPOTHETICAL PROLINE-RICH PROTEIN gi 84493 pir  A34043<br>hypothetical proline-rich protein 1 - polychaete (Owenia<br>fusiformis) (fragment) |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21797 | Seq. ID | OJ990305_04.9819.C65 |
|----------|-------|---------|----------------------|

Gene No. 45442  
 Start 870  
 Name OJ990305\_04.9819.C65.o1.gs  
 Start 1014  
 GI none  
 Exons 1014..1220

Strand +  
 End 1255  
 Method GENSCAN  
 End 1220  
 Score .4

Seq. No. 21798  
 Gene No. 45443  
 Start 70  
 Name OJ990305\_04.9819.C66.o1.gs  
 Start 70  
 GI none  
 Exons 70..227

Seq. ID OJ990305\_04.9819.C66  
 Strand +  
 End 227  
 Method GENSCAN  
 End 227  
 Score .72

Seq. No. 21798  
 Gene No. 45444  
 Start 68  
 Name OJ990305\_04.9819.C66.o1.gp  
 Start 68  
 GI none  
 Exons 68..537

Seq. ID OJ990305\_04.9819.C66  
 Strand -  
 End 537  
 Method AAT/GAP  
 End 537  
 Score 853

Seq. No. 21798  
 Gene No. 45445  
 Start 1585  
 Name OJ990305\_04.9819.C66.o1.tm  
 Start 37  
 GI none  
 Exons 37..117, 68..124, 69..125, 134..238, 140..232, 195..239, 277..303, 280..303

Seq. ID OJ990305\_04.9819.C66  
 Strand -  
 End 1708  
 Method TBLASTX:Maize  
 End 303  
 Score 80

Seq. No. 21798  
 Gene No. 45445  
 Start 1585  
 Name OJ990305\_04.9819.C66.o2.gs  
 Start 1585  
 GI none  
 Exons 1585..1708

Seq. ID OJ990305\_04.9819.C66  
 Strand -  
 End 1708  
 Method GENSCAN  
 End 1708  
 Score .93

Seq. No. 21799  
 Gene No. 45446  
 Start 243  
 Name OJ990305\_04.9819.C67.o1.gs  
 Start 243  
 GI none  
 Exons 243..261, 739..842

Seq. ID OJ990305\_04.9819.C67  
 Strand -  
 End 842  
 Method GENSCAN  
 End 842  
 Score .51

Seq. No. 21800  
 Gene No. 45447  
 Start 255  
 Name OJ990305\_04.9819.C68.o1.gs  
 Start 255  
 GI none  
 Exons 255..426

Seq. ID OJ990305\_04.9819.C68  
 Strand -  
 End 426  
 Method GENSCAN  
 End 426  
 Score .92

Seq. No. 21801

Seq. ID OJ990305\_03.9819.C2

|          |  |        |         |
|----------|--|--------|---------|
| Gene No. | 45448  | Strand | -       |
| Start    | 182  | End    | 2880    |
| Name     | OJ990305_03.9819.C2.ol.gs                          | Method | GENSCAN |
| Start    | 182  | End    | 2880    |
| GI       | none   | Score  | .58     |
| Exons    | 182..250, 286..383, 566..610, 633..764, 2741..2880 |        |         |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21802                     | Seq. ID | OJ990305_03.9819.C3 |
| Gene No. | 45449                     | Strand  | -                   |
| Start    | 343                       | End     | 803                 |
| Name     | OJ990305_03.9819.C3.ol.gs | Method  | GENSCAN             |
| Start    | 343                       | End     | 803                 |
| GI       | none                      | Score   | .47                 |
| Exons    | 343..437, 673..803        |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21803                     | Seq. ID | OJ990305_03.9819.C4 |
| Gene No. | 45450                     | Strand  | +                   |
| Start    | 134                       | End     | 1574                |
| Name     | OJ990305_03.9819.C4.ol.gs | Method  | GENSCAN             |
| Start    | 134                       | End     | 1574                |
| GI       | none                      | Score   | .52                 |
| Exons    | 134..1154, 1160..1574     |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 21804                                       | Seq. ID | OJ990305_03.9819.C5 |
| Gene No. | 45451                                       | Strand  | +                   |
| Start    | 405   | End     | 2315                |
| Name     | OJ990305_03.9819.C5.ol.gs                   | Method  | GENSCAN             |
| Start    | 405   | End     | 2315                |
| GI       | none  | Score   | .75                 |
| Exons    | 405..598, 904..1305, 1555..1674, 2081..2315 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21804  | Seq. ID | OJ990305_03.9819.C5 |
| Gene No. | 45451  | Strand  | +                   |
| Start    | 405  | End     | 2315                |
| Name     | OJ990305_03.9819.C5.ol.ts  | Method  | TBLASTX:Soybean     |
| Start    | 405  | End     | 1287                |
| GI       | none   | Score   | 277                 |
| Exons    | 405..599, 428..598, 911..1099, 913..1074, 1198..1287, 1202..1285 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21804  | Seq. ID | OJ990305_03.9819.C5 |
| Gene No.    | 45451  | Strand  | +                   |
| Start       | 405  | End     | 2315                |
| Name        | OJ990305_03.9819.C5.ol.np  | Method  | AAT/NAP             |
| Start       | 405  | End     | 1294                |
| GI          | 2129771  | Score   | 544                 |
| Exons       | 405..598, 904..1294  |         |                     |
| GI Descrip. | xyloglucan endotransglycosylase-related protein XTR-6 - Arabidopsis thaliana gi 1244758 (U43488) xyloglucan endotransglycosylase-related protein [Arabidopsis thaliana] gi 4539299 emb CAB39602.1  (AL049480) xyloglucan endo-1, 4-beta-D-glucanase (XTR-6) [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21804                     | Seq. ID | OJ990305_03.9819.C5 |
| Gene No. | 45451                     | Strand  | +                   |
| Start    | 405                       | End     | 2315                |
| Name     | OJ990305_03.9819.C5.ol.tm | Method  | TBLASTX:Maize       |
| Start    | 405                       | End     | 1285                |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| GI          | none   | Score   | 283                 |
| Exons       | 405..599, 428..595, 911..1099, 913..1074, 1202..1285 |         |                     |
|             |  |         |                     |
| Seq. No.    | 21804  | Seq. ID | OJ990305_03.9819.C5 |
| Gene No.    | 45451  | Strand  | +                   |
| Start       | 405  | End     | 2315                |
| Name        | OJ990305_03.9819.C5.o1.tc                            | Method  | TBLASTX:Cress       |
| Start       | 411  | End     | 1288                |
| GI          | none   | Score   | 274                 |
| Exons       | 411..599, 428..598, 911..1093, 913..1074, 1202..1288 |         |                     |
|             |  |         |                     |
| Seq. No.    | 21805  | Seq. ID | OJ990305_03.9819.C6 |
| Gene No.    | 45452  | Strand  | -                   |
| Start       | 172  | End     | 491                 |
| Name        | OJ990305_03.9819.C6.o1.gs                            | Method  | GENSCAN             |
| Start       | 172  | End     | 491                 |
| GI          | none   | Score   | .8                  |
| Exons       | 172..344, 485..491                                   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21806  | Seq. ID | OJ990305_03.9819.C7 |
| Gene No.    | 45453  | Strand  | -                   |
| Start       | 684  | End     | 847                 |
| Name        | OJ990305_03.9819.C7.o1.gs                            | Method  | GENSCAN             |
| Start       | 684  | End     | 847                 |
| GI          | none   | Score   | .49                 |
| Exons       | 684..847   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21807  | Seq. ID | OJ990305_03.9819.C8 |
| Gene No.    | 45454  | Strand  | +                   |
| Start       | 1  | End     | 766                 |
| Name        | OJ990305_03.9819.C8.o1.np                            | Method  | AAT/NAP             |
| Start       | 1  | End     | 766                 |
| GI          | 4680179  | Score   | 453                 |
| Exons       | 1..228, 262..766                                     |         |                     |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica]  |         |                     |
|             |  |         |                     |
| Seq. No.    | 21807  | Seq. ID | OJ990305_03.9819.C8 |
| Gene No.    | 45454  | Strand  | +                   |
| Start       | 1  | End     | 766                 |
| Name        | OJ990305_03.9819.C8.o1.gs                            | Method  | GENSCAN             |
| Start       | 130  | End     | 340                 |
| GI          | none   | Score   | .67                 |
| Exons       | 130..340   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21807  | Seq. ID | OJ990305_03.9819.C8 |
| Gene No.    | 45454  | Strand  | +                   |
| Start       | 1  | End     | 766                 |
| Name        | OJ990305_03.9819.C8.o1.tm                            | Method  | TBLASTX:Maize       |
| Start       | 283  | End     | 606                 |
| GI          | none   | Score   | 187                 |
| Exons       | 283..606   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21807  | Seq. ID | OJ990305_03.9819.C8 |
| Gene No.    | 45454  | Strand  | +                   |
| Start       | 1  | End     | 766                 |
| Name        | OJ990305_03.9819.C8.o1.tw                            | Method  | TBLASTX:Wheat       |
| Start       | 289  | End     | 657                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| GI          | none   | Score   | 164                  |
| Exons       | 289..498, 345..497, 543..656, 544..657   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21808  | Seq. ID | OJ990305_03.9819.C9  |
| Gene No.    | 45455  | Strand  | +                    |
| Start       | 772  | End     | 1322                 |
| Name        | OJ990305_03.9819.C9.o1.gs  | Method  | GENSCAN              |
| Start       | 772  | End     | 1322                 |
| GI          | none   | Score   | .42                  |
| Exons       | 772..856, 1261..1322   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21808  | Seq. ID | OJ990305_03.9819.C9  |
| Gene No.    | 45456  | Strand  | -                    |
| Start       | 1366   | End     | 2610                 |
| Name        | OJ990305_03.9819.C9.o1.np  | Method  | AAT/NAP              |
| Start       | 1366   | End     | 2610                 |
| GI          | 5777617  | Score   | 76                   |
| Exons       | 1366..1469, 2548..2610   |         |                      |
| GI Descrip. | (AJ245900) CAA30375.1 protein [Oryza sativa]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21808  | Seq. ID | OJ990305_03.9819.C9  |
| Gene No.    | 45456  | Strand  | -                    |
| Start       | 1366   | End     | 2610                 |
| Name        | OJ990305_03.9819.C9.o1.gp  | Method  | AAT/GAP              |
| Start       | 2416   | End     | 2610                 |
| GI          | 5005380  | Score   | 342                  |
| Exons       | 2416..2610   |         |                      |
| GI Descrip. | 1890577/emb CAA63663  2.0e-20 (X93175) xyloglucan endotransglycosylase (XET) [Hordeum vulgare] |         |                      |
|             |  |         |                      |
| Seq. No.    | 21808  | Seq. ID | OJ990305_03.9819.C9  |
| Gene No.    | 45456  | Strand  | -                    |
| Start       | 1366   | End     | 2610                 |
| Name        | OJ990305_03.9819.C9.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 2439   | End     | 2579                 |
| GI          | none   | Score   | 179                  |
| Exons       | 2439..2579, 2440..2574   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21808  | Seq. ID | OJ990305_03.9819.C9  |
| Gene No.    | 45456  | Strand  | -                    |
| Start       | 1366   | End     | 2610                 |
| Name        | OJ990305_03.9819.C9.o2.gs  | Method  | GENSCAN              |
| Start       | 2440   | End     | 2550                 |
| GI          | none   | Score   | .55                  |
| Exons       | 2440..2550   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21808  | Seq. ID | OJ990305_03.9819.C9  |
| Gene No.    | 45456  | Strand  | -                    |
| Start       | 1366   | End     | 2610                 |
| Name        | OJ990305_03.9819.C9.o2.np  | Method  | AAT/NAP              |
| Start       | 2443   | End     | 2610                 |
| GI          | 1890577  | Score   | 223                  |
| Exons       | 2443..2610   |         |                      |
| GI Descrip. | (X93175) xyloglucan endotransglycosylase (XET) [Hordeum vulgare]                               |         |                      |
|             |  |         |                      |
| Seq. No.    | 21809  | Seq. ID | OJ990305_03.9819.C10 |
| Gene No.    | 45457  | Strand  | +                    |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Start       | 940  | End     | 3178                 |
| Name        | OJ990305_03.9819.C10.o2.gs                                       | Method  | GENSCAN              |
| Start       | 940  | End     | 3178                 |
| GI          | none   | Score   | .58                  |
| Exons       | 940..985, 1081..1168, 1222..1406, 2580..2861, 3147..3178         |         |                      |
|             |  |         |                      |
| Seq. No.    | 21809  | Seq. ID | OJ990305_03.9819.C10 |
| Gene No.    | 45457  | Strand  | +                    |
| Start       | 940  | End     | 3178                 |
| Name        | OJ990305_03.9819.C10.o1.gp                                       | Method  | AAT/GAP              |
| Start       | 1415   | End     | 2187                 |
| GI          | 4107141  | Score   | 1239                 |
| Exons       | 1415..1447, 1470..2187   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21809  | Seq. ID | OJ990305_03.9819.C10 |
| Gene No.    | 45458  | Strand  | -                    |
| Start       | 1  | End     | 632                  |
| Name        | OJ990305_03.9819.C10.o1.np                                       | Method  | AAT/NAP              |
| Start       | 1  | End     | 632                  |
| GI          | 1890577  | Score   | 566                  |
| Exons       | 1..237, 372..632   |         |                      |
| GI Descrip. | (X93175) xyloglucan endotransglycosylase (XET) [Hordeum vulgare] |         |                      |
|             |  |         |                      |
| Seq. No.    | 21809  | Seq. ID | OJ990305_03.9819.C10 |
| Gene No.    | 45458  | Strand  | -                    |
| Start       | 1  | End     | 632                  |
| Name        | OJ990305_03.9819.C10.o1.gs                                       | Method  | GENSCAN              |
| Start       | 10   | End     | 632                  |
| GI          | none   | Score   | .67                  |
| Exons       | 10..237, 372..632  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21809  | Seq. ID | OJ990305_03.9819.C10 |
| Gene No.    | 45459  | Strand  | -                    |
| Start       | 2669   | End     | 2968                 |
| Name        | OJ990305_03.9819.C10.o1.tc                                       | Method  | TBLASTX:Cress        |
| Start       | 45   | End     | 569                  |
| GI          | none   | Score   | 137                  |
| Exons       | 45..98, 94..243, 95..226, 369..569, 379..486                     |         |                      |
|             |  |         |                      |
| Seq. No.    | 21809  | Seq. ID | OJ990305_03.9819.C10 |
| Gene No.    | 45459  | Strand  | -                    |
| Start       | 2669   | End     | 2968                 |
| Name        | OJ990305_03.9819.C10.o2.ts                                       | Method  | TBLASTX:Soybean      |
| Start       | 45   | End     | 240                  |
| GI          | none   | Score   | 140                  |
| Exons       | 45..98, 89..226, 94..237, 100..240                               |         |                      |
|             |  |         |                      |
| Seq. No.    | 21809  | Seq. ID | OJ990305_03.9819.C10 |
| Gene No.    | 45459  | Strand  | -                    |
| Start       | 2669   | End     | 2968                 |
| Name        | OJ990305_03.9819.C10.o1.tm                                       | Method  | TBLASTX:Maize        |
| Start       | 163  | End     | 612                  |
| GI          | none   | Score   | 76                   |
| Exons       | 163..243, 163..243, 366..599, 373..495, 411..584, 550..612       |         |                      |
|             |  |         |                      |
| Seq. No.    | 21809  | Seq. ID | OJ990305_03.9819.C10 |
| Gene No.    | 45459  | Strand  | -                    |



|             |  |         |                      |
|-------------|--|---------|----------------------|
| Start       | 2669   | End     | 2968                 |
| Name        | OJ990305_03.9819.C10.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 352  | End     | 635                  |
| GI          | none   | Score   | 136                  |
| Exons       | 352..522, 369..635, 382..495, 417..584   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21809  | Seq. ID | OJ990305_03.9819.C10 |
| Gene No.    | 45459  | Strand  | -                    |
| Start       | 2669   | End     | 2968                 |
| Name        | OJ990305_03.9819.C10.o2.gp   | Method  | AAT/GAP              |
| Start       | 2669   | End     | 2968                 |
| GI          | 2280891  | Score   | 536                  |
| Exons       | 2669..2968   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21810  | Seq. ID | OJ990305_03.9819.C11 |
| Gene No.    | 45460  | Strand  | +                    |
| Start       | 29   | End     | 139                  |
| Name        | OJ990305_03.9819.C11.o1.gs   | Method  | GENSCAN              |
| Start       | 29   | End     | 139                  |
| GI          | none   | Score   | .7                   |
| Exons       | 29..139  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21811  | Seq. ID | OJ990305_03.9819.C12 |
| Gene No.    | 45461  | Strand  | +                    |
| Start       | 111  | End     | 350                  |
| Name        | OJ990305_03.9819.C12.o1.gs   | Method  | GENSCAN              |
| Start       | 111  | End     | 350                  |
| GI          | none   | Score   | .52                  |
| Exons       | 111..150, 192..350   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21812  | Seq. ID | OJ990305_03.9819.C13 |
| Gene No.    | 45462  | Strand  | +                    |
| Start       | 1  | End     | 1035                 |
| Name        | OJ990305_03.9819.C13.o1.gp   | Method  | AAT/GAP              |
| Start       | 1  | End     | 369                  |
| GI          | LIB3431-049-P1-N1-A8   | Score   | 434                  |
| Exons       | 1..174, 265..369   |         |                      |
| GI Descrip. | '1890577/emb CAA63663  2.0e-20 (X93175) xyloglucan endotransglycosylase (XET) [Hordeum vulgare]'   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21812  | Seq. ID | OJ990305_03.9819.C13 |
| Gene No.    | 45462  | Strand  | +                    |
| Start       | 1  | End     | 1035                 |
| Name        | OJ990305_03.9819.C13.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 1035                 |
| GI          | 563235   | Score   | 569                  |
| Exons       | 1..174, 265..458, 902..1035  |         |                      |
| GI Descrip. | (U15964) xyloglucan endo-transglycosylase homolog; similar to Triticum aestivum endo-xyloglucan transferase, PIR Accession Number E49539 [Zea mays] gi 563927 (U15781) xyloglucan endo-transglycosylase homolog [Zea mays] gi 1097378 prf  2113418A xyloglucan endotransglycosylase homolog [Zea mays] |         |                      |
|             |  |         |                      |
| Seq. No.    | 21812  | Seq. ID | OJ990305_03.9819.C13 |
| Gene No.    | 45462  | Strand  | +                    |
| Start       | 1  | End     | 1035                 |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990305_03.9819.C13.ol.tm   | Method | TBLASTX:Maize |
| Start | 5  | End    | 1007          |
| GI    | none   | Score  | 87            |
| Exons | 5..64, 17..94, 33..134, 33..173, 34..177, 250..462, 295..351, 300..452, 418..456, 902..931, 903..938, 959..1006, 960..1007 |        |               |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21812   | Seq. ID | OJ990305_03.9819.C13 |
| Gene No. | 45462   | Strand  | +                    |
| Start    | 1   | End     | 1035                 |
| Name     | OJ990305_03.9819.C13.ol.tc                                | Method  | TBLASTX:Cress        |
| Start    | 33  | End     | 1007                 |
| GI       | none  | Score   | 214                  |
| Exons    | 33..173, 34..180, 265..459, 300..446, 909..950, 957..1007 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21812  | Seq. ID | OJ990305_03.9819.C13 |
| Gene No. | 45462  | Strand  | +                    |
| Start    | 1  | End     | 1035                 |
| Name     | OJ990305_03.9819.C13.ol.ts   | Method  | TBLASTX:Soybean      |
| Start    | 33   | End     | 1007                 |
| GI       | none   | Score   | 225                  |
| Exons    | 33..179, 34..180, 265..462, 300..446, 903..947, 905..946, 956..1006, 957..1007 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21812                        | Seq. ID | OJ990305_03.9819.C13 |
| Gene No. | 45462                        | Strand  | +                    |
| Start    | 1                            | End     | 1035                 |
| Name     | OJ990305_03.9819.C13.ol.gs   | Method  | GENSCAN              |
| Start    | 66                           | End     | 1014                 |
| GI       | none                         | Score   | .77                  |
| Exons    | 66..204, 277..458, 902..1014 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21813   | Seq. ID | OJ990305_03.9819.C14 |
| Gene No.    | 45463   | Strand  | +                    |
| Start       | 579   | End     | 779                  |
| Name        | OJ990305_03.9819.C14.ol.np                      | Method  | AAT/NAP              |
| Start       | 579   | End     | 779                  |
| GI          | 4680186   | Score   | 333                  |
| Exons       | 579..779  |         |                      |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21813  | Seq. ID | OJ990305_03.9819.C14 |
| Gene No.    | 45464  | Strand  | -                    |
| Start       | 331  | End     | 712                  |
| Name        | OJ990305_03.9819.C14.ol.gp   | Method  | AAT/GAP              |
| Start       | 331  | End     | 712                  |
| GI          | uC-osflcyp033a04b1   | Score   | 651                  |
| Exons       | 331..712   |         |                      |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21814                      | Seq. ID | OJ990305_03.9819.C15 |
| Gene No. | 45465                      | Strand  | +                    |
| Start    | 1                          | End     | 1553                 |
| Name     | OJ990305_03.9819.C15.ol.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 1553                 |
| GI       | 4544372                    | Score   | 363                  |
| Exons    | 1..30, 736..1553           |         |                      |

GI Descrip. (AC006920) putative retroelement pol polyprotein [Arabidopsis thaliana]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21814                      | Seq. ID | OJ990305_03.9819.C15 |
| Gene No. | 45465                      | Strand  | +                    |
| Start    | 1                          | End     | 1553                 |
| Name     | OJ990305_03.9819.C15.o1.gs | Method  | GENSCAN              |
| Start    | 198                        | End     | 1468                 |
| GI       | none                       | Score   | .6                   |
| Exons    | 198..343, 718..1468        |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21814                      | Seq. ID | OJ990305_03.9819.C15 |
| Gene No. | 45465                      | Strand  | +                    |
| Start    | 1                          | End     | 1553                 |
| Name     | OJ990305_03.9819.C15.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 737                        | End     | 1102                 |
| GI       | none                       | Score   | 195                  |
| Exons    | 737..1102                  |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21814  | Seq. ID | OJ990305_03.9819.C15 |
| Gene No.    | 45465  | Strand  | +                    |
| Start       | 1  | End     | 1553                 |
| Name        | OJ990305_03.9819.C15.o2.np   | Method  | AAT/NAP              |
| Start       | 743  | End     | 1553                 |
| GI          | 629693   | Score   | 361                  |
| Exons       | 743..1553  |         |                      |
| GI Descrip. | probable integrase - common tobacco (fragment)<br>gi 530742 emb CAA56791  (X80830) integrase [Nicotiana tabacum] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21814                      | Seq. ID | OJ990305_03.9819.C15 |
| Gene No. | 45465                      | Strand  | +                    |
| Start    | 1                          | End     | 1553                 |
| Name     | OJ990305_03.9819.C15.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 1139                       | End     | 1540                 |
| GI       | none                       | Score   | 221                  |
| Exons    | 1139..1540, 1339..1512     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21814                      | Seq. ID | OJ990305_03.9819.C15 |
| Gene No. | 45465                      | Strand  | +                    |
| Start    | 1                          | End     | 1553                 |
| Name     | OJ990305_03.9819.C15.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 1322                       | End     | 1552                 |
| GI       | none                       | Score   | 215                  |
| Exons    | 1322..1552, 1324..1494     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21815                      | Seq. ID | OJ990305_03.9819.C16 |
| Gene No. | 45466                      | Strand  | +                    |
| Start    | 50                         | End     | 737                  |
| Name     | OJ990305_03.9819.C16.o1.gs | Method  | GENSCAN              |
| Start    | 50                         | End     | 638                  |
| GI       | none                       | Score   | .59                  |
| Exons    | 50..240, 297..638          |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21815                      | Seq. ID | OJ990305_03.9819.C16 |
| Gene No. | 45466                      | Strand  | +                    |
| Start    | 50                         | End     | 737                  |
| Name     | OJ990305_03.9819.C16.o1.np | Method  | AAT/NAP              |

|             |   |       |     |
|-------------|---|-------|-----|
| Start       | 315   | End   | 737 |
| GI          | 6721562   | Score | 482 |
| Exons       | 315..737  |       |     |
| GI Descrip. | (AP001073) Similar to Zea mays 22-kDa alpha zein gene cluster; hypothetical protein. (AF031569) [Oryza sativa]                            |       |     |
|             | gi 6815087 dbj BAA90373.1  (AP001081) Similar to Zea mays 22-kDa alpha zein gene cluster; hypothetical protein. (AF031569) [Oryza sativa] |       |     |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21816   | Seq. ID | OJ990305_03.9819.C17 |
| Gene No.    | 45467   | Strand  | +                    |
| Start       | 1   | End     | 2079                 |
| Name        | OJ990305_03.9819.C17.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 2079                 |
| GI          | 6498441   | Score   | 2037                 |
| Exons       | 1..502, 833..1296, 1360..1733, 1917..2079   |         |                      |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21816                      | Seq. ID | OJ990305_03.9819.C17 |
| Gene No. | 45467                      | Strand  | +                    |
| Start    | 1                          | End     | 2079                 |
| Name     | OJ990305_03.9819.C17.o1.gs | Method  | GENSCAN              |
| Start    | 49                         | End     | 1359                 |
| GI       | none                       | Score   | .78                  |
| Exons    | 49..1359                   |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21816                                     | Seq. ID | OJ990305_03.9819.C17 |
| Gene No. | 45467                                     | Strand  | +                    |
| Start    | 1   | End     | 2079                 |
| Name     | OJ990305_03.9819.C17.o2.tw                | Method  | TBLASTX:Wheat        |
| Start    | 717                                       | End     | 1203                 |
| GI       | none                                      | Score   | 408                  |
| Exons    | 717..890, 718..1203, 912..1172, 982..1176 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21816  | Seq. ID | OJ990305_03.9819.C17 |
| Gene No. | 45467  | Strand  | +                    |
| Start    | 1  | End     | 2079                 |
| Name     | OJ990305_03.9819.C17.o1.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 1367   | End     | 1830                 |
| GI       | none   | Score   | 205                  |
| Exons    | 1367..1810, 1368..1823, 1369..1830, 1369..1824 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21816                      | Seq. ID | OJ990305_03.9819.C17 |
| Gene No. | 45467                      | Strand  | +                    |
| Start    | 1                          | End     | 2079                 |
| Name     | OJ990305_03.9819.C17.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 1408                       | End     | 1773                 |
| GI       | none                       | Score   | 118                  |
| Exons    | 1408..1632, 1639..1773     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21816                      | Seq. ID | OJ990305_03.9819.C17 |
| Gene No. | 45467                      | Strand  | +                    |
| Start    | 1                          | End     | 2079                 |
| Name     | OJ990305_03.9819.C17.o2.gs | Method  | GENSCAN              |
| Start    | 1423                       | End     | 1977                 |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| GI          | none  | Score   | .97                  |
| Exons       | 1423..1977  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21816   | Seq. ID | OJ990305_03.9819.C17 |
| Gene No.    | 45467   | Strand  | +                    |
| Start       | 1   | End     | 2079                 |
| Name        | OJ990305_03.9819.C17.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 1498  | End     | 1854                 |
| GI          | none  | Score   | 389                  |
| Exons       | 1498..1854, 1533..1844, 1549..1854  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21816   | Seq. ID | OJ990305_03.9819.C17 |
| Gene No.    | 45467   | Strand  | +                    |
| Start       | 1   | End     | 2079                 |
| Name        | OJ990305_03.9819.C17.o3.tw  | Method  | TBLASTX:Wheat        |
| Start       | 1831  | End     | 1998                 |
| GI          | none  | Score   | 174                  |
| Exons       | 1831..1998, 1839..1997  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21817   | Seq. ID | OJ990305_03.9819.C18 |
| Gene No.    | 45468   | Strand  | -                    |
| Start       | 430   | End     | 1054                 |
| Name        | OJ990305_03.9819.C18.o1.gp  | Method  | AAT/GAP              |
| Start       | 430   | End     | 1054                 |
| GI          | 15803_1.R1084   | Score   | 1161                 |
| Exons       | 430..1054   |         |                      |
| GI Descrip. | '3004558 1.0e-42 (AC003673) peroxidase ATP22a [Arabidopsis thaliana]'       |         |                      |
|             |   |         |                      |
| Seq. No.    | 21817   | Seq. ID | OJ990305_03.9819.C18 |
| Gene No.    | 45468   | Strand  | -                    |
| Start       | 430   | End     | 1054                 |
| Name        | OJ990305_03.9819.C18.o1.gs  | Method  | GENSCAN              |
| Start       | 653   | End     | 979                  |
| GI          | none  | Score   | .78                  |
| Exons       | 653..979  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21817   | Seq. ID | OJ990305_03.9819.C18 |
| Gene No.    | 45468   | Strand  | -                    |
| Start       | 430   | End     | 1054                 |
| Name        | OJ990305_03.9819.C18.o1.np  | Method  | AAT/NAP              |
| Start       | 656   | End     | 1054                 |
| GI          | 1620369   | Score   | 264                  |
| Exons       | 656..1054   |         |                      |
| GI Descrip. | (Y08781} peroxidase ATP22a [Arabidopsis thaliana]                           |         |                      |
|             |   |         |                      |
| Seq. No.    | 21817   | Seq. ID | OJ990305_03.9819.C18 |
| Gene No.    | 45468   | Strand  | -                    |
| Start       | 430   | End     | 1054                 |
| Name        | OJ990305_03.9819.C18.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 668   | End     | 1053                 |
| GI          | none  | Score   | 302                  |
| Exons       | 668..700, 678..986, 698..985, 933..1022, 1027..1053, 1027..1050, 1028..1051 |         |                      |
|             |   |         |                      |
| Seq. No.    | 21817   | Seq. ID | OJ990305_03.9819.C18 |
| Gene No.    | 45468   | Strand  | -                    |

|       |                            |        |               |
|-------|----------------------------|--------|---------------|
| Start | 430                        | End    | 1054          |
| Name  | OJ990305_03.9819.C18.ol.tc | Method | TBLASTX:Cress |
| Start | 689                        | End    | 985           |
| GI    | none                       | Score  | 166           |
| Exons | 689..985, 708..911         |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21817                      | Seq. ID | OJ990305_03.9819.C18 |
| Gene No. | 45468                      | Strand  | -                    |
| Start    | 430                        | End     | 1054                 |
| Name     | OJ990305_03.9819.C18.ol.ts | Method  | TBLASTX:Soybean      |
| Start    | 704                        | End     | 985                  |
| GI       | none                       | Score   | 135                  |
| Exons    | 704..985, 705..905         |         |                      |

|             |                                   |         |                      |
|-------------|-----------------------------------|---------|----------------------|
| Seq. No.    | 21818                             | Seq. ID | OJ990305_03.9819.C20 |
| Gene No.    | 45469                             | Strand  | +                    |
| Start       | 1                                 | End     | 1468                 |
| Name        | OJ990305_03.9819.C20.ol.np        | Method  | AAT/NAP              |
| Start       | 1                                 | End     | 1468                 |
| GI          | 5852093                           | Score   | 87                   |
| Exons       | 1..102, 1362..1468                |         |                      |
| GI Descrip. | (AL117264) zwh16.1 [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21819   | Seq. ID | OJ990305_03.9819.C21 |
| Gene No.    | 45470   | Strand  | +                    |
| Start       | 1   | End     | 1478                 |
| Name        | OJ990305_03.9819.C21.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1478                 |
| GI          | 5441880   | Score   | 765                  |
| Exons       | 1..401, 905..1478   |         |                      |
| GI Descrip. | (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21819                      | Seq. ID | OJ990305_03.9819.C21 |
| Gene No. | 45470                      | Strand  | +                    |
| Start    | 1                          | End     | 1478                 |
| Name     | OJ990305_03.9819.C21.ol.gs | Method  | GENSCAN              |
| Start    | 324                        | End     | 1055                 |
| GI       | none                       | Score   | .81                  |
| Exons    | 324..521, 905..1055        |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21820  | Seq. ID | OJ990305_03.9819.C22 |
| Gene No.    | 45471  | Strand  | -                    |
| Start       | 1  | End     | 859                  |
| Name        | OJ990305_03.9819.C22.ol.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 859                  |
| GI          | 5042447  | Score   | 621                  |
| Exons       | 1..859   |         |                      |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21820                      | Seq. ID | OJ990305_03.9819.C22 |
| Gene No. | 45471                      | Strand  | -                    |
| Start    | 1                          | End     | 859                  |
| Name     | OJ990305_03.9819.C22.ol.tm | Method  | TBLASTX:Maize        |
| Start    | 83                         | End     | 385                  |
| GI       | none                       | Score   | 95                   |

Exons 83..385, 255..371

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21820                        | Seq. ID | OJ990305_03.9819.C22 |
| Gene No. | 45471                        | Strand  | -                    |
| Start    | 1                            | End     | 859                  |
| Name     | OJ990305_03.9819.C22.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 266                          | End     | 628                  |
| GI       | none                         | Score   | 136                  |
| Exons    | 266..628, 267..596, 464..613 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21821   | Seq. ID | OJ990305_03.9819.C23 |
| Gene No.    | 45472   | Strand  | -                    |
| Start       | 1   | End     | 1659                 |
| Name        | OJ990305_03.9819.C23.o1.np                            | Method  | AAT/NAP              |
| Start       | 1   | End     | 1659                 |
| GI          | 3004558   | Score   | 266                  |
| Exons       | 1..260, 1368..1565, 1639..1659                        |         |                      |
| GI Descrip. | (AC003673) peroxidase (ATP22a) [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21821                                    | Seq. ID | OJ990305_03.9819.C23 |
| Gene No. | 45472                                    | Strand  | -                    |
| Start    | 1  | End     | 1659                 |
| Name     | OJ990305_03.9819.C23.o1.tc               | Method  | TBLASTX:Cress        |
| Start    | 93                                       | End     | 1565                 |
| GI       | none                                     | Score   | 142                  |
| Exons    | 93..257, 94..258, 1356..1502, 1518..1565 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21821   | Seq. ID | OJ990305_03.9819.C23 |
| Gene No.    | 45472   | Strand  | -                    |
| Start       | 1   | End     | 1659                 |
| Name        | OJ990305_03.9819.C23.o1.gp  | Method  | AAT/GAP              |
| Start       | 95  | End     | 217                  |
| GI          | 15803_1.R1084   | Score   | 210                  |
| Exons       | 95..217   |         |                      |
| GI Descrip. | '3004558 1.0e-42 (AC003673) peroxidase ATP22a [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21821                                    | Seq. ID | OJ990305_03.9819.C23 |
| Gene No. | 45472                                    | Strand  | -                    |
| Start    | 1  | End     | 1659                 |
| Name     | OJ990305_03.9819.C23.o1.gs               | Method  | GENSCAN              |
| Start    | 95                                       | End     | 1559                 |
| GI       | none                                     | Score   | .88                  |
| Exons    | 95..260, 610..653, 968..1055, 1368..1559 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21821   | Seq. ID | OJ990305_03.9819.C23 |
| Gene No.    | 45472   | Strand  | -                    |
| Start       | 1   | End     | 1659                 |
| Name        | OJ990305_03.9819.C23.o2.gp  | Method  | AAT/GAP              |
| Start       | 1446  | End     | 1559                 |
| GI          | 33840_1.R1084   | Score   | 181                  |
| Exons       | 1446..1559  |         |                      |
| GI Descrip. | '1546706/emb CAA67361  7.0e-17 (X98855) peroxidase ATP8a [Arabidopsis thaliana] >gi_5730127_emb CAB52461.1_ (AL109796) peroxidase ATP8a [Arabidopsis thaliana]' |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21822 | Seq. ID | OJ990305_03.9819.C24 |
|----------|-------|---------|----------------------|

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 45473  | Strand  | +                    |
| Start       | 371  | End     | 573                  |
| Name        | OJ990305_03.9819.C24.o1.gs   | Method  | GENSCAN              |
| Start       | 371  | End     | 573                  |
| GI          | none   | Score   | .84                  |
| Exons       | 371..573   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21822  | Seq. ID | OJ990305_03.9819.C24 |
| Gene No.    | 45474  | Strand  | -                    |
| Start       | 1467   | End     | 2233                 |
| Name        | OJ990305_03.9819.C24.o2.gs   | Method  | GENSCAN              |
| Start       | 1467   | End     | 2233                 |
| GI          | none   | Score   | .77                  |
| Exons       | 1467..1631, 2036..2233   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21823  | Seq. ID | OJ990305_03.9819.C25 |
| Gene No.    | 45475  | Strand  | +                    |
| Start       | 255  | End     | 3871                 |
| Name        | OJ990305_03.9819.C25.o1.gs   | Method  | GENSCAN              |
| Start       | 255  | End     | 3871                 |
| GI          | none   | Score   | .57                  |
| Exons       | 255..416, 1305..1496, 2998..3158, 3316..3632, 3712..3871                                       |         |                      |
|             |  |         |                      |
| Seq. No.    | 21823  | Seq. ID | OJ990305_03.9819.C25 |
| Gene No.    | 45476  | Strand  | -                    |
| Start       | 4717   | End     | 8604                 |
| Name        | OJ990305_03.9819.C25.o2.gs   | Method  | GENSCAN              |
| Start       | 4717   | End     | 8604                 |
| GI          | none   | Score   | .74                  |
| Exons       | 4717..4928, 5137..5423, 5711..5849, 6330..6420, 8501..8604                                     |         |                      |
|             |  |         |                      |
| Seq. No.    | 21823  | Seq. ID | OJ990305_03.9819.C25 |
| Gene No.    | 45476  | Strand  | -                    |
| Start       | 4717   | End     | 8604                 |
| Name        | OJ990305_03.9819.C25.o1.gp   | Method  | AAT/GAP              |
| Start       | 8086   | End     | 8240                 |
| GI          | 3106672  | Score   | 203                  |
| Exons       | 8086..8240   |         |                      |
| GI Descrip. | 5734616/dbj AP000391.1 AP000391 7.0e-48 Oryza sativa genomic DNA, chromosome 6, clone:P0538C01 |         |                      |
|             |  |         |                      |
| Seq. No.    | 21824  | Seq. ID | OJ990305_03.9819.C26 |
| Gene No.    | 45477  | Strand  | +                    |
| Start       | 706  | End     | 860                  |
| Name        | OJ990305_03.9819.C26.o1.gp   | Method  | AAT/GAP              |
| Start       | 706  | End     | 860                  |
| GI          | 7406_1.R1084   | Score   | 207                  |
| Exons       | 706..860   |         |                      |
| GI Descrip. | '1122315/emb CAA63901  7.0e-10 (X94191) heat shock protein 17.0 [Pennisetum glaucum]'          |         |                      |
|             |  |         |                      |
| Seq. No.    | 21825  | Seq. ID | OJ990305_03.9819.C27 |
| Gene No.    | 45478  | Strand  | -                    |
| Start       | 1  | End     | 265                  |
| Name        | OJ990305_03.9819.C27.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 265                  |
| GI          | 5922634  | Score   | 92                   |



Exons 1..94, 166..265  
 GI Descrip. (AP000492) hypothetical protein [Oryza sativa]  
 gi|6016867|dbj|BAA85210.1| (AP000570) hypothetical protein  
 [Oryza sativa]

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21825   | Seq. ID | OJ990305_03.9819.C27 |
| Gene No.    | 45479   | Strand  | -                    |
| Start       | 2136  | End     | 3366                 |
| Name        | OJ990305_03.9819.C27.o2.np                                  | Method  | AAT/NAP              |
| Start       | 2136  | End     | 3366                 |
| GI          | 6721547   | Score   | 87                   |
| Exons       | 2136..2219, 3282..3366                                      |         |                      |
| GI Descrip. | (AP001073) Similar to Oryza sativa gene for Pib. (AB013448) |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21826                      | Seq. ID | OJ990305_03.9819.C28 |
| Gene No. | 45480                      | Strand  | -                    |
| Start    | 1330                       | End     | 1467                 |
| Name     | OJ990305_03.9819.C28.o1.gs | Method  | GENSCAN              |
| Start    | 1330                       | End     | 1467                 |
| GI       | none                       | Score   | .53                  |
| Exons    | 1330..1467                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21827                      | Seq. ID | OJ990305_03.9819.C29 |
| Gene No. | 45481                      | Strand  | +                    |
| Start    | 1344                       | End     | 2704                 |
| Name     | OJ990305_03.9819.C29.o1.gp | Method  | AAT/GAP              |
| Start    | 1344                       | End     | 2704                 |
| GI       | none                       | Score   | 1633                 |
| Exons    | 1344..1779, 2256..2704     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21828                      | Seq. ID | OJ990305_03.9819.C30 |
| Gene No. | 45482                      | Strand  | +                    |
| Start    | 970                        | End     | 1058                 |
| Name     | OJ990305_03.9819.C30.o1.gs | Method  | GENSCAN              |
| Start    | 970                        | End     | 1058                 |
| GI       | none                       | Score   | .9                   |
| Exons    | 970..1058                  |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21829                      | Seq. ID | OJ990305_03.9819.C31 |
| Gene No. | 45483                      | Strand  | +                    |
| Start    | 1407                       | End     | 1893                 |
| Name     | OJ990305_03.9819.C31.o1.gs | Method  | GENSCAN              |
| Start    | 1407                       | End     | 1893                 |
| GI       | none                       | Score   | .76                  |
| Exons    | 1407..1463, 1657..1893     |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21830   | Seq. ID | OJ990305_03.9819.C32 |
| Gene No.    | 45484   | Strand  | -                    |
| Start       | 63  | End     | 754                  |
| Name        | OJ990305_03.9819.C32.o1.gp  | Method  | AAT/GAP              |
| Start       | 63  | End     | 697                  |
| GI          | 15803_1.R1084   | Score   | 1171                 |
| Exons       | 63..697   |         |                      |
| GI Descrip. | '3004558 1.0e-42 (AC003673) peroxidase ATP22a [Arabidopsis thaliana]' |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21830 | Seq. ID | OJ990305_03.9819.C32 |
|----------|-------|---------|----------------------|

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 45484  | Strand  | -                    |
| Start       | 63   | End     | 754                  |
| Name        | OJ990305_03.9819.C32.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 281  | End     | 694                  |
| GI          | none   | Score   | 149                  |
| Exons       | 281..343, 335..628, 336..593, 646..693, 662..694   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21830  | Seq. ID | OJ990305_03.9819.C32 |
| Gene No.    | 45484  | Strand  | -                    |
| Start       | 63   | End     | 754                  |
| Name        | OJ990305_03.9819.C32.o1.gs   | Method  | GENSCAN              |
| Start       | 284  | End     | 610                  |
| GI          | none   | Score   | .65                  |
| Exons       | 284..610   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21830  | Seq. ID | OJ990305_03.9819.C32 |
| Gene No.    | 45484  | Strand  | -                    |
| Start       | 63   | End     | 754                  |
| Name        | OJ990305_03.9819.C32.o1.np   | Method  | AAT/NAP              |
| Start       | 287  | End     | 754                  |
| GI          | 1620369  | Score   | 319                  |
| Exons       | 287..754   |         |                      |
| GI Descrip. | (Y08781) peroxidase ATP22a [Arabidopsis thaliana]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21830  | Seq. ID | OJ990305_03.9819.C32 |
| Gene No.    | 45484  | Strand  | -                    |
| Start       | 63   | End     | 754                  |
| Name        | OJ990305_03.9819.C32.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 299  | End     | 699                  |
| GI          | none   | Score   | 338                  |
| Exons       | 299..331, 309..617, 329..616, 434..619, 564..620, 626..694, 627..695, 634..693, 646..699                             |         |                      |
|             |  |         |                      |
| Seq. No.    | 21830  | Seq. ID | OJ990305_03.9819.C32 |
| Gene No.    | 45484  | Strand  | -                    |
| Start       | 63   | End     | 754                  |
| Name        | OJ990305_03.9819.C32.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 335  | End     | 617                  |
| GI          | none   | Score   | 173                  |
| Exons       | 335..616, 336..617   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21831  | Seq. ID | OJ990305_03.9819.C33 |
| Gene No.    | 45485  | Strand  | +                    |
| Start       | 71   | End     | 1057                 |
| Name        | OJ990305_03.9819.C33.o1.gs   | Method  | GENSCAN              |
| Start       | 71   | End     | 1057                 |
| GI          | none   | Score   | .97                  |
| Exons       | 71..373, 609..692, 771..1057   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21832  | Seq. ID | OJ990305_03.9819.C36 |
| Gene No.    | 45486  | Strand  | +                    |
| Start       | 830  | End     | 2838                 |
| Name        | OJ990305_03.9819.C36.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 800  | End     | 2387                 |
| GI          | none   | Score   | 215                  |
| Exons       | 800..1045, 802..1047, 919..1059, 1172..1372, 1177..1368, 1274..1369, 1299..1373, 1302..1382, 2275..2343, 2276..2386, |         |                      |

2277..2387

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 21832                             | Seq. ID | OJ990305_03.9819.C36 |
| Gene No. | 45486                             | Strand  | +                    |
| Start    | 830                               | End     | 2838                 |
| Name     | OJ990305_03.9819.C36.o1.gs        | Method  | GENSCAN              |
| Start    | 830                               | End     | 2436                 |
| GI       | none                              | Score   | .99                  |
| Exons    | 830..1138, 1178..1375, 2277..2436 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21832  | Seq. ID | OJ990305_03.9819.C36 |
| Gene No.    | 45486  | Strand  | +                    |
| Start       | 830  | End     | 2838                 |
| Name        | OJ990305_03.9819.C36.o1.np   | Method  | AAT/NAP              |
| Start       | 830  | End     | 2838                 |
| GI          | 1546706  | Score   | 404                  |
| Exons       | 830..1048, 1178..1375, 2277..2838  |         |                      |
| GI Descrip. | (X98855) peroxidase ATP8a [Arabidopsis thaliana]<br>gi 5730127 emb CAB52461.1  (AL109796) peroxidase ATP8a<br>[Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21832  | Seq. ID | OJ990305_03.9819.C36 |
| Gene No. | 45486  | Strand  | +                    |
| Start    | 830  | End     | 2838                 |
| Name     | OJ990305_03.9819.C36.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 854  | End     | 2438                 |
| GI       | none   | Score   | 160                  |
| Exons    | 854..1048, 1172..1222, 1238..1369, 1246..1368, 2268..2345,<br>2270..2344, 2349..2438, 2351..2437 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21832  | Seq. ID | OJ990305_03.9819.C36 |
| Gene No. | 45486  | Strand  | +                    |
| Start    | 830  | End     | 2838                 |
| Name     | OJ990305_03.9819.C36.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 899  | End     | 2438                 |
| GI       | none   | Score   | 133                  |
| Exons    | 899..1048, 1172..1219, 1211..1369, 1237..1362, 2277..2345,<br>2348..2437, 2349..2438, 2367..2438 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21832   | Seq. ID | OJ990305_03.9819.C36 |
| Gene No.    | 45486   | Strand  | +                    |
| Start       | 830   | End     | 2838                 |
| Name        | OJ990305_03.9819.C36.o1.gp  | Method  | AAT/GAP              |
| Start       | 971   | End     | 2438                 |
| GI          | uC-osf1M202054g10b1   | Score   | 806                  |
| Exons       | 971..1048, 1178..1375, 2277..2438   |         |                      |
| GI Descrip. | '1546706/emb CAA67361  3.0e-45 (X98855) peroxidase ATP8a<br>[Arabidopsis thaliana] >gi_5730127 emb CAB52461.1_ (AL109796)<br>peroxidase ATP8a [Arabidopsis thaliana]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21833                      | Seq. ID | OJ990305_03.9819.C37 |
| Gene No. | 45487                      | Strand  | +                    |
| Start    | 164                        | End     | 315                  |
| Name     | OJ990305_03.9819.C37.o1.gs | Method  | GENSCAN              |
| Start    | 164                        | End     | 315                  |
| GI       | none                       | Score   | .85                  |
| Exons    | 164..315                   |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21834   | Seq. ID | OJ990305_03.9819.C38 |
| Gene No.    | 45488   | Strand  | +                    |
| Start       | 1   | End     | 1325                 |
| Name        | OJ990305_03.9819.C38.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1322                 |
| GI          | 6498441   | Score   | 1269                 |
| Exons       | 1..947, 1041..1322  |         |                      |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21834                      | Seq. ID | OJ990305_03.9819.C38 |
| Gene No. | 45488                      | Strand  | +                    |
| Start    | 1                          | End     | 1325                 |
| Name     | OJ990305_03.9819.C38.o1.gs | Method  | GENSCAN              |
| Start    | 554                        | End     | 1325                 |
| GI       | none                       | Score   | .92                  |
| Exons    | 554..1325                  |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21834  | Seq. ID | OJ990305_03.9819.C38 |
| Gene No.    | 45489  | Strand  | +                    |
| Start       | 1484   | End     | 1945                 |
| Name        | OJ990305_03.9819.C38.o1.gp   | Method  | AAT/GAP              |
| Start       | 1484   | End     | 1945                 |
| GI          | 2428323  | Score   | 846                  |
| Exons       | 1484..1945   |         |                      |
| GI Descrip. | 5803242/dbj AP000399.1 AP000399 0.0e+00 Oryza sativa genomic DNA, chromosome 6, clone:P0535G04 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21834                      | Seq. ID | OJ990305_03.9819.C38 |
| Gene No. | 45490                      | Strand  | -                    |
| Start    | 1953                       | End     | 2629                 |
| Name     | OJ990305_03.9819.C38.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 480                        | End     | 728                  |
| GI       | none                       | Score   | 113                  |
| Exons    | 480..617, 615..728         |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21834                        | Seq. ID | OJ990305_03.9819.C38 |
| Gene No. | 45490                        | Strand  | -                    |
| Start    | 1953                         | End     | 2629                 |
| Name     | OJ990305_03.9819.C38.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 546                          | End     | 911                  |
| GI       | none                         | Score   | 306                  |
| Exons    | 546..905, 548..676, 645..911 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21834                      | Seq. ID | OJ990305_03.9819.C38 |
| Gene No. | 45490                      | Strand  | -                    |
| Start    | 1953                       | End     | 2629                 |
| Name     | OJ990305_03.9819.C38.o2.gs | Method  | GENSCAN              |
| Start    | 1953                       | End     | 2497                 |
| GI       | none                       | Score   | .93                  |
| Exons    | 1953..2497                 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21834 | Seq. ID | OJ990305_03.9819.C38 |
| Gene No. | 45490 | Strand  | -                    |
| Start    | 1953  | End     | 2629                 |

|             |  |        |         |
|-------------|--|--------|---------|
| Name        | OJ990305_03.9819.C38.o2.np                     | Method | AAT/NAP |
| Start       | 1956   | End    | 2629    |
| GI          | 5803259  | Score  | 1000    |
| Exons       | 1956..2629                                     |        |         |
| GI Descrip. | (AP000399) hypothetical protein [Oryza sativa] |        |         |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21835  | Seq. ID | OJ990305_03.9819.C39 |
| Gene No.    | 45491  | Strand  | -                    |
| Start       | 1  | End     | 1147                 |
| Name        | OJ990305_03.9819.C39.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 1147                 |
| GI          | 5803259  | Score   | 1336                 |
| Exons       | 1..1147  |         |                      |
| GI Descrip. | (AP000399) hypothetical protein [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21836   | Seq. ID | OJ990305_03.9819.C40 |
| Gene No.    | 45492   | Strand  | +                    |
| Start       | 1   | End     | 1139                 |
| Name        | OJ990305_03.9819.C40.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1139                 |
| GI          | 5441880   | Score   | 1408                 |
| Exons       | 1..912, 1117..1139  |         |                      |
| GI Descrip. | (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21836   | Seq. ID | OJ990305_03.9819.C40 |
| Gene No. | 45492   | Strand  | +                    |
| Start    | 1   | End     | 1139                 |
| Name     | OJ990305_03.9819.C40.o1.tm                        | Method  | TBLASTX:Maize        |
| Start    | 468   | End     | 1064                 |
| GI       | none  | Score   | 93                   |
| Exons    | 468..596, 476..574, 630..929, 647..868, 993..1064 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21836   | Seq. ID | OJ990305_03.9819.C40 |
| Gene No.    | 45492   | Strand  | +                    |
| Start       | 1   | End     | 1139                 |
| Name        | OJ990305_03.9819.C40.o1.gp  | Method  | AAT/GAP              |
| Start       | 511   | End     | 942                  |
| GI          | 5701669   | Score   | 841                  |
| Exons       | 511..942  |         |                      |
| GI Descrip. | 5441880/dbj BAA82378.1  5.0e-75 (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21836                                    | Seq. ID | OJ990305_03.9819.C40 |
| Gene No. | 45492                                    | Strand  | +                    |
| Start    | 1  | End     | 1139                 |
| Name     | OJ990305_03.9819.C40.o1.tw               | Method  | TBLASTX:Wheat        |
| Start    | 762                                      | End     | 1082                 |
| GI       | none                                     | Score   | 204                  |
| Exons    | 762..968, 762..956, 962..1081, 966..1082 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21837                      | Seq. ID | OJ990305_03.9819.C42 |
| Gene No. | 45493                      | Strand  | -                    |
| Start    | 1                          | End     | 632                  |
| Name     | OJ990305_03.9819.C42.o1.np | Method  | AAT/NAP              |

|             |  |       |     |
|-------------|--|-------|-----|
| Start       | 1  | End   | 632 |
| GI          | 2117624  | Score | 365 |
| Exons       | 1..80, 225..632  |       |     |
| GI Descrip. | peroxidase (EC 1.11.1.7) 2 - alfalfa gi 971564 emb CAA62228 <br>(X90695) peroxidase2 [Medicago sativa] |       |     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21837                      | Seq. ID | OJ990305_03.9819.C42 |
| Gene No. | 45493                      | Strand  | -                    |
| Start    | 1                          | End     | 632                  |
| Name     | OJ990305_03.9819.C42.o1.gs | Method  | GENSCAN              |
| Start    | 15                         | End     | 632                  |
| GI       | none                       | Score   | .98                  |
| Exons    | 15..159, 225..632          |         |                      |

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 21837                             | Seq. ID | OJ990305_03.9819.C42 |
| Gene No. | 45494                             | Strand  | -                    |
| Start    | 2869                              | End     | 4992                 |
| Name     | OJ990305_03.9819.C42.o1.tm        | Method  | TBLASTX:Maize        |
| Start    | 3                                 | End     | 615                  |
| GI       | none                              | Score   | 91                   |
| Exons    | 3..80, 17..82, 225..614, 226..615 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21837  | Seq. ID | OJ990305_03.9819.C42 |
| Gene No. | 45494  | Strand  | -                    |
| Start    | 2869   | End     | 4992                 |
| Name     | OJ990305_03.9819.C42.o1.tw                                       | Method  | TBLASTX:Wheat        |
| Start    | 12   | End     | 590                  |
| GI       | none   | Score   | 62                   |
| Exons    | 12..80, 13..90, 225..287, 230..292, 357..590, 400..447, 499..549 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21837  | Seq. ID | OJ990305_03.9819.C42 |
| Gene No. | 45494  | Strand  | -                    |
| Start    | 2869   | End     | 4992                 |
| Name     | OJ990305_03.9819.C42.o1.tc                             | Method  | TBLASTX:Cress        |
| Start    | 13   | End     | 608                  |
| GI       | none   | Score   | 65                   |
| Exons    | 13..81, 24..80, 225..368, 226..366, 378..608, 409..585 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21837  | Seq. ID | OJ990305_03.9819.C42 |
| Gene No. | 45494  | Strand  | -                    |
| Start    | 2869   | End     | 4992                 |
| Name     | OJ990305_03.9819.C42.o1.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 24   | End     | 632                  |
| GI       | none   | Score   | 125                  |
| Exons    | 24..80, 225..401, 232..402, 393..632, 409..537 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21837                              | Seq. ID | OJ990305_03.9819.C42 |
| Gene No. | 45494                              | Strand  | -                    |
| Start    | 2869                               | End     | 4992                 |
| Name     | OJ990305_03.9819.C42.o2.gs         | Method  | GENSCAN              |
| Start    | 2869                               | End     | 4992                 |
| GI       | none                               | Score   | .71                  |
| Exons    | 2869..2874, 3798..3939, 4946..4992 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21838 | Seq. ID | OJ990305_03.9819.C44 |
| Gene No. | 45495 | Strand  | +                    |
| Start    | 599   | End     | 752                  |

|             |  |        |         |
|-------------|--|--------|---------|
| Name        | OJ990305_03.9819.C44.ol.np                     | Method | AAT/NAP |
| Start       | 599  | End    | 752     |
| GI          | 5803259  | Score  | 220     |
| Exons       | 599..752                                       |        |         |
| GI Descrip. | (AP000399) hypothetical protein [Oryza sativa] |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21838                      | Seq. ID | OJ990305_03.9819.C44 |
| Gene No. | 45496                      | Strand  | -                    |
| Start    | 554                        | End     | 690                  |
| Name     | OJ990305_03.9819.C44.ol.gs | Method  | GENSCAN              |
| Start    | 554                        | End     | 690                  |
| GI       | none                       | Score   | .91                  |
| Exons    | 554..690                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21839                      | Seq. ID | OJ990305_03.9819.C46 |
| Gene No. | 45497                      | Strand  | -                    |
| Start    | 83                         | End     | 713                  |
| Name     | OJ990305_03.9819.C46.ol.gs | Method  | GENSCAN              |
| Start    | 83                         | End     | 713                  |
| GI       | none                       | Score   | .8                   |
| Exons    | 83..191, 664..713          |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21840   | Seq. ID | OJ990305_03.9819.C47 |
| Gene No.    | 45498   | Strand  | +                    |
| Start       | 1   | End     | 725                  |
| Name        | OJ990305_03.9819.C47.ol.gp  | Method  | AAT/GAP              |
| Start       | 1   | End     | 725                  |
| GI          | 1517_1.R1084  | Score   | 1108                 |
| Exons       | 1..118, 266..725  |         |                      |
| GI Descrip. | '5852170/emb AL117265.1 OST17804 1.0e-50 Oryza sativa indica(GLA4) genomic DNA, chromosome 4, BAC clone:t17804' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21840  | Seq. ID | OJ990305_03.9819.C47 |
| Gene No.    | 45498  | Strand  | +                    |
| Start       | 1  | End     | 725                  |
| Name        | OJ990305_03.9819.C47.ol.np                                       | Method  | AAT/NAP              |
| Start       | 1  | End     | 454                  |
| GI          | 4538920  | Score   | 336                  |
| Exons       | 1..118, 266..454   |         |                      |
| GI Descrip. | (AL049483) nitrogen fixation like protein [Arabidopsis thaliana] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21840                                       | Seq. ID | OJ990305_03.9819.C47 |
| Gene No. | 45498                                       | Strand  | +                    |
| Start    | 1   | End     | 725                  |
| Name     | OJ990305_03.9819.C47.ol.ts                  | Method  | TBLASTX:Soybean      |
| Start    | 1   | End     | 456                  |
| GI       | none  | Score   | 153                  |
| Exons    | 1..90, 2..127, 263..448, 263..424, 265..456 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21840                                       | Seq. ID | OJ990305_03.9819.C47 |
| Gene No. | 45498                                       | Strand  | +                    |
| Start    | 1   | End     | 725                  |
| Name     | OJ990305_03.9819.C47.o2.tw                  | Method  | TBLASTX:Wheat        |
| Start    | 1   | End     | 456                  |
| GI       | none  | Score   | 128                  |
| Exons    | 1..87, 2..136, 256..456, 257..448, 265..456 |         |                      |

Seq. No. 21840  
 Gene No. 45498  
 Start 1  
 Name OJ990305\_03.9819.C47.o1.gs  
 Start 11  
 GI none  
 Exons 11..118, 266..457

Seq. ID OJ990305\_03.9819.C47  
 Strand +  
 End 725  
 Method GENSCAN  
 End 457  
 Score .98

Seq. No. 21840  
 Gene No. 45498  
 Start 1  
 Name OJ990305\_03.9819.C47.o1.tc  
 Start 26  
 GI none  
 Exons 26..70, 74..136, 263..478, 263..475, 265..507

Seq. ID OJ990305\_03.9819.C47  
 Strand +  
 End 725  
 Method TBLASTX:Cress  
 End 507  
 Score 43

Seq. No. 21840  
 Gene No. 45499  
 Start 1489  
 Name OJ990305\_03.9819.C47.o1.tw  
 Start 1489  
 GI none  
 Exons 1489..1740, 1492..1740, 1496..1741

Seq. ID OJ990305\_03.9819.C47  
 Strand +  
 End 1741  
 Method TBLASTX:Wheat  
 End 1741  
 Score 286

Seq. No. 21841  
 Gene No. 45500  
 Start 15  
 Name OJ990305\_03.9819.C48.o1.gs  
 Start 15  
 GI none  
 Exons 15..1066

Seq. ID OJ990305\_03.9819.C48  
 Strand -  
 End 1066  
 Method GENSCAN  
 End 1066  
 Score .69

Seq. No. 21842  
 Gene No. 45501  
 Start 1060  
 Name OJ990305\_03.9819.C49.o1.gs  
 Start 1060  
 GI none  
 Exons 1060..1183, 1280..1500, 1817..2203

Seq. ID OJ990305\_03.9819.C49  
 Strand +  
 End 2203  
 Method GENSCAN  
 End 2203  
 Score .9

Seq. No. 21842  
 Gene No. 45502  
 Start 2651  
 Name OJ990305\_03.9819.C49.o2.gs  
 Start 2651  
 GI none  
 Exons 2651..2857

Seq. ID OJ990305\_03.9819.C49  
 Strand -  
 End 2857  
 Method GENSCAN  
 End 2857  
 Score .66

Seq. No. 21843  
 Gene No. 45503  
 Start 94  
 Name OJ990305\_03.9819.C50.o1.gs  
 Start 94  
 GI none  
 Exons 94..993, 1090..2074

Seq. ID OJ990305\_03.9819.C50  
 Strand +  
 End 2074  
 Method GENSCAN  
 End 2074  
 Score .51

Seq. No. 21844

Seq. ID OJ990305\_03.9819.C51



|          |  |         |                      |
|----------|--|---------|----------------------|
| Gene No. | 45504  | Strand  | +                    |
| Start    | 80   | End     | 657                  |
| Name     | OJ990305_03.9819.C51.o1.gs   | Method  | GENSCAN              |
| Start    | 80   | End     | 657                  |
| GI       | none   | Score   | .68                  |
| Exons    | 80..370, 638..657  |         |                      |
|          |  |         |                      |
| Seq. No. | 21844  | Seq. ID | OJ990305_03.9819.C51 |
| Gene No. | 45505  | Strand  | -                    |
| Start    | 1148   | End     | 1297                 |
| Name     | OJ990305_03.9819.C51.o2.gs   | Method  | GENSCAN              |
| Start    | 1148   | End     | 1297                 |
| GI       | none   | Score   | .61                  |
| Exons    | 1148..1297   |         |                      |
|          |  |         |                      |
| Seq. No. | 21845  | Seq. ID | OJ990305_03.9819.C52 |
| Gene No. | 45506  | Strand  | +                    |
| Start    | 136  | End     | 2202                 |
| Name     | OJ990305_03.9819.C52.o1.gs   | Method  | GENSCAN              |
| Start    | 136  | End     | 2202                 |
| GI       | none   | Score   | .79                  |
| Exons    | 136..191, 1646..1868, 2051..2202   |         |                      |
|          |  |         |                      |
| Seq. No. | 21845  | Seq. ID | OJ990305_03.9819.C52 |
| Gene No. | 45507  | Strand  | +                    |
| Start    | 3069   | End     | 3719                 |
| Name     | OJ990305_03.9819.C52.o2.gs   | Method  | GENSCAN              |
| Start    | 3069   | End     | 3719                 |
| GI       | none   | Score   | .54                  |
| Exons    | 3069..3719   |         |                      |
|          |  |         |                      |
| Seq. No. | 21845  | Seq. ID | OJ990305_03.9819.C52 |
| Gene No. | 45508  | Strand  | +                    |
| Start    | 3697   | End     | 4023                 |
| Name     | OJ990305_03.9819.C52.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 3016   | End     | 3386                 |
| GI       | none   | Score   | 114                  |
| Exons    | 3016..3165, 3054..3185, 3111..3386, 3196..3375                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 21845  | Seq. ID | OJ990305_03.9819.C52 |
| Gene No. | 45508  | Strand  | +                    |
| Start    | 3697   | End     | 4023                 |
| Name     | OJ990305_03.9819.C52.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 3628   | End     | 3869                 |
| GI       | none   | Score   | 81                   |
| Exons    | 3628..3690, 3629..3697, 3700..3867, 3704..3763, 3704..3868, 3705..3869, 3723..3869 |         |                      |
|          |  |         |                      |
| Seq. No. | 21845  | Seq. ID | OJ990305_03.9819.C52 |
| Gene No. | 45508  | Strand  | +                    |
| Start    | 3697   | End     | 4023                 |
| Name     | OJ990305_03.9819.C52.o1.gp   | Method  | AAT/GAP              |
| Start    | 3697   | End     | 4023                 |
| GI       | none   | Score   | 617                  |
| Exons    | 3697..4023   |         |                      |
|          |  |         |                      |
| Seq. No. | 21846  | Seq. ID | OJ990305_03.9819.C53 |

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 45509  | Strand | -       |
| Start       | 1  | End    | 2259    |
| Name        | OJ990305_03.9819.C53.o1.np                           | Method | AAT/NAP |
| Start       | 1  | End    | 2259    |
| GI          | 4680179  | Score  | 3158    |
| Exons       | 1..2259  |        |         |
| GI Descrip. | (AF1111709) polyprotein [Oryza sativa subsp. indica] |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21846                      | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                      | Strand  | -                    |
| Start    | 1                          | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o3.tw | Method  | TBLASTX:Wheat        |
| Start    | 69                         | End     | 441                  |
| GI       | none                       | Score   | 213                  |
| Exons    | 69..434, 72..440, 79..441  |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21846                        | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                        | Strand  | -                    |
| Start    | 1                            | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 162                          | End     | 482                  |
| GI       | none                         | Score   | 177                  |
| Exons    | 162..470, 165..482, 220..471 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21846                      | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                      | Strand  | -                    |
| Start    | 1                          | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o1.gs | Method  | GENSCAN              |
| Start    | 357                        | End     | 2093                 |
| GI       | none                       | Score   | .89                  |
| Exons    | 357..2093                  |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21846                        | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                        | Strand  | -                    |
| Start    | 1                            | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 398                          | End     | 659                  |
| GI       | none                         | Score   | 150                  |
| Exons    | 398..580, 399..659, 400..654 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21846                        | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                        | Strand  | -                    |
| Start    | 1                            | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 423                          | End     | 740                  |
| GI       | none                         | Score   | 85                   |
| Exons    | 423..566, 424..564, 567..740 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21846                      | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                      | Strand  | -                    |
| Start    | 1                          | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 447                        | End     | 1025                 |
| GI       | none                       | Score   | 330                  |
| Exons    | 447..1025, 448..1014       |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21846 | Seq. ID | OJ990305_03.9819.C53 |
|----------|-------|---------|----------------------|

|          |                              |        |               |
|----------|------------------------------|--------|---------------|
| Gene No. | 45509                        | Strand | -             |
| Start    | 1                            | End    | 2259          |
| Name     | OJ990305_03.9819.C53.o4.tm   | Method | TBLASTX:Maize |
| Start    | 483                          | End    | 797           |
| GI       | none                         | Score  | 96            |
| Exons    | 483..797, 484..687, 633..773 |        |               |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21846                              | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                              | Strand  | -                    |
| Start    | 1                                  | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o1.tm         | Method  | TBLASTX:Maize        |
| Start    | 1005                               | End     | 1368                 |
| GI       | none                               | Score   | 181                  |
| Exons    | 1005..1367, 1014..1367, 1018..1368 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21846                              | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                              | Strand  | -                    |
| Start    | 1                                  | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o2.tw         | Method  | TBLASTX:Wheat        |
| Start    | 1026                               | End     | 2119                 |
| GI       | none                               | Score   | 358                  |
| Exons    | 1026..1439, 1027..1407, 2057..2119 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21846                      | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                      | Strand  | -                    |
| Start    | 1                          | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 1188                       | End     | 1433                 |
| GI       | none                       | Score   | 89                   |
| Exons    | 1188..1433, 1189..1416     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21846  | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509  | Strand  | -                    |
| Start    | 1  | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o3.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 1404   | End     | 1904                 |
| GI       | none   | Score   | 50                   |
| Exons    | 1404..1718, 1447..1497, 1525..1578, 1725..1904, 1750..1896 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21846                              | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                              | Strand  | -                    |
| Start    | 1                                  | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o5.tw         | Method  | TBLASTX:Wheat        |
| Start    | 1440                               | End     | 1692                 |
| GI       | none                               | Score   | 133                  |
| Exons    | 1440..1688, 1446..1691, 1456..1692 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21846  | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509  | Strand  | -                    |
| Start    | 1  | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1455   | End     | 1850                 |
| GI       | none   | Score   | 117                  |
| Exons    | 1455..1727, 1455..1814, 1456..1746, 1774..1812, 1781..1813, 1818..1850, 1819..1848 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21846 | Seq. ID | OJ990305_03.9819.C53 |
|----------|-------|---------|----------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 45509  | Strand | -             |
| Start    | 1  | End    | 2259          |
| Name     | OJ990305_03.9819.C53.o4.tw   | Method | TBLASTX:Wheat |
| Start    | 1694   | End    | 2054          |
| GI       | none   | Score  | 65            |
| Exons    | 1694..1882, 1695..1811, 1711..1905, 1716..1913, 1917..2000, 1921..2001, 1983..2054 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21846                      | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                      | Strand  | -                    |
| Start    | 1                          | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o2.tc | Method  | TBLASTX:Cress        |
| Start    | 1827                       | End     | 2144                 |
| GI       | none                       | Score   | 180                  |
| Exons    | 1827..2144                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21846                      | Seq. ID | OJ990305_03.9819.C53 |
| Gene No. | 45509                      | Strand  | -                    |
| Start    | 1                          | End     | 2259                 |
| Name     | OJ990305_03.9819.C53.o5.tm | Method  | TBLASTX:Maize        |
| Start    | 1972                       | End     | 2202                 |
| GI       | none                       | Score   | 152                  |
| Exons    | 1972..2202, 1974..2165     |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21847   | Seq. ID | OJ990305_03.9819.C55 |
| Gene No.    | 45510   | Strand  | +                    |
| Start       | 1439  | End     | 2494                 |
| Name        | OJ990305_03.9819.C55.o1.np  | Method  | AAT/NAP              |
| Start       | 1439  | End     | 2494                 |
| GI          | 4580469   | Score   | 331                  |
| Exons       | 1439..1953, 2101..2342, 2370..2494                                  |         |                      |
| GI Descrip. | (AC006081) putative RING zinc finger protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21847  | Seq. ID | OJ990305_03.9819.C55 |
| Gene No. | 45511  | Strand  | -                    |
| Start    | 2962   | End     | 3102                 |
| Name     | OJ990305_03.9819.C55.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 1556   | End     | 1933                 |
| GI       | none   | Score   | 86                   |
| Exons    | 1556..1633, 1562..1609, 1701..1769, 1732..1911, 1796..1933 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21847                      | Seq. ID | OJ990305_03.9819.C55 |
| Gene No. | 45511                      | Strand  | -                    |
| Start    | 2962                       | End     | 3102                 |
| Name     | OJ990305_03.9819.C55.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 1711                       | End     | 1933                 |
| GI       | none                       | Score   | 289                  |
| Exons    | 1711..1911, 1712..1933     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21847                              | Seq. ID | OJ990305_03.9819.C55 |
| Gene No. | 45511                              | Strand  | -                    |
| Start    | 2962                               | End     | 3102                 |
| Name     | OJ990305_03.9819.C55.o1.ts         | Method  | TBLASTX:Soybean      |
| Start    | 1712                               | End     | 1957                 |
| GI       | none                               | Score   | 349                  |
| Exons    | 1712..1933, 1714..1911, 1715..1957 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21847                      | Seq. ID | OJ990305_03.9819.C55 |
| Gene No. | 45511                      | Strand  | -                    |
| Start    | 2962                       | End     | 3102                 |
| Name     | OJ990305_03.9819.C55.o2.gs | Method  | GENSCAN              |
| Start    | 2962                       | End     | 3102                 |
| GI       | none                       | Score   | .4                   |
| Exons    | 2962..3102                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21848   | Seq. ID | OJ990305_03.9819.C57 |
| Gene No.    | 45512   | Strand  | +                    |
| Start       | 158   | End     | 1260                 |
| Name        | OJ990305_03.9819.C57.o1.np                                | Method  | AAT/NAP              |
| Start       | 158   | End     | 1260                 |
| GI          | 4586576   | Score   | 256                  |
| Exons       | 158..503, 1165..1260                                      |         |                      |
| GI Descrip. | (AB024992) multidrug resistance protein [Cicer arietinum] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21848                      | Seq. ID | OJ990305_03.9819.C57 |
| Gene No. | 45512                      | Strand  | +                    |
| Start    | 158                        | End     | 1260                 |
| Name     | OJ990305_03.9819.C57.o1.gs | Method  | GENSCAN              |
| Start    | 173                        | End     | 500                  |
| GI       | none                       | Score   | .87                  |
| Exons    | 173..500                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21848  | Seq. ID | OJ990305_03.9819.C57 |
| Gene No. | 45512  | Strand  | +                    |
| Start    | 158  | End     | 1260                 |
| Name     | OJ990305_03.9819.C57.o1.tm                       | Method  | TBLASTX:Maize        |
| Start    | 205  | End     | 504                  |
| GI       | none   | Score   | 66                   |
| Exons    | 205..267, 206..286, 227..502, 331..504, 353..502 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21848                        | Seq. ID | OJ990305_03.9819.C57 |
| Gene No. | 45512                        | Strand  | +                    |
| Start    | 158                          | End     | 1260                 |
| Name     | OJ990305_03.9819.C57.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 281                          | End     | 504                  |
| GI       | none                         | Score   | 183                  |
| Exons    | 281..496, 331..504, 353..502 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21849                      | Seq. ID | OJ990305_03.9819.C58 |
| Gene No. | 45513                      | Strand  | -                    |
| Start    | 261                        | End     | 653                  |
| Name     | OJ990305_03.9819.C58.o1.gs | Method  | GENSCAN              |
| Start    | 261                        | End     | 653                  |
| GI       | none                       | Score   | .59                  |
| Exons    | 261..653                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21850                      | Seq. ID | OJ990305_03.9819.C59 |
| Gene No. | 45514                      | Strand  | +                    |
| Start    | 23                         | End     | 294                  |
| Name     | OJ990305_03.9819.C59.o1.gs | Method  | GENSCAN              |
| Start    | 23                         | End     | 294                  |
| GI       | none                       | Score   | .62                  |
| Exons    | 23..221, 278..294          |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21851  | Seq. ID | OJ990305_03.9819.C60 |
| Gene No.    | 45515  | Strand  | +                    |
| Start       | 120  | End     | 684                  |
| Name        | OJ990305_03.9819.C60.o1.gp                                     | Method  | AAT/GAP              |
| Start       | 120  | End     | 684                  |
| GI          | 4107141  | Score   | 1007                 |
| Exons       | 120..684   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21852  | Seq. ID | OJ990305_03.9819.C61 |
| Gene No.    | 45516  | Strand  | +                    |
| Start       | 123  | End     | 777                  |
| Name        | OJ990305_03.9819.C61.o1.gs                                     | Method  | GENSCAN              |
| Start       | 123  | End     | 422                  |
| GI          | none   | Score   | .9                   |
| Exons       | 123..422   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21852  | Seq. ID | OJ990305_03.9819.C61 |
| Gene No.    | 45516  | Strand  | +                    |
| Start       | 123  | End     | 777                  |
| Name        | OJ990305_03.9819.C61.o1.np                                     | Method  | AAT/NAP              |
| Start       | 135  | End     | 777                  |
| GI          | 3901012  | Score   | 143                  |
| Exons       | 135..428, 662..777   |         |                      |
| GI Descrip. | (AJ130885) xyloglucan endotransglycosylase 1 [Fagus sylvatica] |         |                      |
|             |  |         |                      |
| Seq. No.    | 21852  | Seq. ID | OJ990305_03.9819.C61 |
| Gene No.    | 45516  | Strand  | +                    |
| Start       | 123  | End     | 777                  |
| Name        | OJ990305_03.9819.C61.o1.ts                                     | Method  | TBLASTX:Soybean      |
| Start       | 224  | End     | 579                  |
| GI          | none   | Score   | 201                  |
| Exons       | 224..271, 225..428, 335..412, 541..579                         |         |                      |
|             |  |         |                      |
| Seq. No.    | 21852  | Seq. ID | OJ990305_03.9819.C61 |
| Gene No.    | 45516  | Strand  | +                    |
| Start       | 123  | End     | 777                  |
| Name        | OJ990305_03.9819.C61.o1.tc                                     | Method  | TBLASTX:Cress        |
| Start       | 225  | End     | 428                  |
| GI          | none   | Score   | 187                  |
| Exons       | 225..428, 335..412   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21852  | Seq. ID | OJ990305_03.9819.C61 |
| Gene No.    | 45516  | Strand  | +                    |
| Start       | 123  | End     | 777                  |
| Name        | OJ990305_03.9819.C61.o1.tm                                     | Method  | TBLASTX:Maize        |
| Start       | 225  | End     | 428                  |
| GI          | none   | Score   | 194                  |
| Exons       | 225..428   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21853  | Seq. ID | OJ990305_03.9819.C62 |
| Gene No.    | 45517  | Strand  | +                    |
| Start       | 47   | End     | 282                  |
| Name        | OJ990305_03.9819.C62.o1.gs                                     | Method  | GENSCAN              |
| Start       | 47   | End     | 282                  |
| GI          | none   | Score   | .52                  |
| Exons       | 47..282  |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21853  | Seq. ID | OJ990305_03.9819.C62 |
| Gene No.    | 45518  | Strand  | -                    |
| Start       | 694  | End     | 1042                 |
| Name        | OJ990305_03.9819.C62.o1.np                             | Method  | AAT/NAP              |
| Start       | 577  | End     | 930                  |
| GI          | 2459439  | Score   | 146                  |
| Exons       | 577..930   |         |                      |
| GI Descrip. | (AC002332) hypothetical protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21853                      | Seq. ID | OJ990305_03.9819.C62 |
| Gene No. | 45518                      | Strand  | -                    |
| Start    | 694                        | End     | 1042                 |
| Name     | OJ990305_03.9819.C62.o2.gs | Method  | GENSCAN              |
| Start    | 694                        | End     | 1042                 |
| GI       | none                       | Score   | .96                  |
| Exons    | 694..835, 867..1042        |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21853  | Seq. ID | OJ990305_03.9819.C62 |
| Gene No.    | 45518  | Strand  | -                    |
| Start       | 694  | End     | 1042                 |
| Name        | OJ990305_03.9819.C62.o1.gp   | Method  | AAT/GAP              |
| Start       | 746  | End     | 930                  |
| GI          | LIB3433-043-P1-K1-E5   | Score   | 211                  |
| Exons       | 746..930   |         |                      |
| GI Descrip. | '2982434/emb CAA18242.1  9.0e-58 (AL022224) putative protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21853  | Seq. ID | OJ990305_03.9819.C62 |
| Gene No. | 45519  | Strand  | -                    |
| Start    | 3177   | End     | 4665                 |
| Name     | OJ990305_03.9819.C62.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 3174   | End     | 4641                 |
| GI       | none   | Score   | 58                   |
| Exons    | 3174..3212, 3213..3428, 3504..3566, 3646..3738, 3647..3739, 3739..3807, 3740..3808, 4234..4401, 4271..4399, 4411..4641, 4439..4564 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21853                      | Seq. ID | OJ990305_03.9819.C62 |
| Gene No. | 45519                      | Strand  | -                    |
| Start    | 3177                       | End     | 4665                 |
| Name     | OJ990305_03.9819.C62.o3.gs | Method  | GENSCAN              |
| Start    | 3177                       | End     | 3813                 |
| GI       | none                       | Score   | .88                  |
| Exons    | 3177..3553, 3648..3813     |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21853   | Seq. ID | OJ990305_03.9819.C62 |
| Gene No.    | 45519   | Strand  | -                    |
| Start       | 3177  | End     | 4665                 |
| Name        | OJ990305_03.9819.C62.o2.np  | Method  | AAT/NAP              |
| Start       | 3183  | End     | 4665                 |
| GI          | 2117624   | Score   | 640                  |
| Exons       | 3183..3553, 3648..3807, 4258..4665  |         |                      |
| GI Descrip. | peroxidase (EC 1.11.1.7) 2 - alfalfa gi 971564 emb CAA62228  (X90695) peroxidase2 [Medicago sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21853 | Seq. ID | OJ990305_03.9819.C62 |
|----------|-------|---------|----------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 45519  | Strand | -             |
| Start    | 3177   | End    | 4665          |
| Name     | OJ990305_03.9819.C62.o2.tm                     | Method | TBLASTX:Maize |
| Start    | 3192   | End    | 3581          |
| GI       | none   | Score  | 66            |
| Exons    | 3192..3257, 3192..3449, 3196..3354, 3504..3581 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21853  | Seq. ID | OJ990305_03.9819.C62 |
| Gene No. | 45519  | Strand  | -                    |
| Start    | 3177   | End     | 4665                 |
| Name     | OJ990305_03.9819.C62.o2.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 3213   | End     | 3735                 |
| GI       | none   | Score   | 105                  |
| Exons    | 3213..3428, 3214..3426, 3492..3596, 3646..3735 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21853  | Seq. ID | OJ990305_03.9819.C62 |
| Gene No. | 45519  | Strand  | -                    |
| Start    | 3177   | End     | 4665                 |
| Name     | OJ990305_03.9819.C62.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 3650   | End     | 4632                 |
| GI       | none   | Score   | 36                   |
| Exons    | 3650..3754, 3739..3807, 3740..3817, 4258..4320, 4260..4322, 4390..4632, 4433..4480, 4465..4596 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21853  | Seq. ID | OJ990305_03.9819.C62 |
| Gene No. | 45519  | Strand  | -                    |
| Start    | 3177   | End     | 4665                 |
| Name     | OJ990305_03.9819.C62.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 3701   | End     | 4647                 |
| GI       | none   | Score   | 123                  |
| Exons    | 3701..3808, 3703..3807, 4258..4647, 4259..4570, 4462..4596 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21853  | Seq. ID | OJ990305_03.9819.C62 |
| Gene No. | 45519  | Strand  | -                    |
| Start    | 3177   | End     | 4665                 |
| Name     | OJ990305_03.9819.C62.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3751   | End     | 4665                 |
| GI       | none   | Score   | 62                   |
| Exons    | 3751..3807, 3752..3805, 4258..4434, 4271..4435, 4426..4665, 4439..4570 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21853                      | Seq. ID | OJ990305_03.9819.C62 |
| Gene No. | 45519                      | Strand  | -                    |
| Start    | 3177                       | End     | 4665                 |
| Name     | OJ990305_03.9819.C62.o4.gs | Method  | GENSCAN              |
| Start    | 4183                       | End     | 4665                 |
| GI       | none                       | Score   | .92                  |
| Exons    | 4183..4665                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21854  | Seq. ID | OJ990305_03.9819.C63 |
| Gene No.    | 45520  | Strand  | +                    |
| Start       | 505  | End     | 1750                 |
| Name        | OJ990305_03.9819.C63.o1.np                     | Method  | AAT/NAP              |
| Start       | 505  | End     | 1750                 |
| GI          | 6721543  | Score   | 124                  |
| Exons       | 505..635, 1688..1750                           |         |                      |
| GI Descrip. | (AP001073) hypothetical protein [Oryza sativa] |         |                      |



|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21854   | Seq. ID | OJ990305_03.9819.C63 |
| Gene No.    | 45520   | Strand  | +                    |
| Start       | 505   | End     | 1750                 |
| Name        | OJ990305_03.9819.C63.o1.gp  | Method  | AAT/GAP              |
| Start       | 519   | End     | 957                  |
| GI          | 7406_1.R1084  | Score   | 579                  |
| Exons       | 519..848, 883..957  |         |                      |
| GI Descrip. | '1122315/emb CAA63901  7.0e-10 (X94191) heat shock protein 17.0 [Pennisetum glaucum]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21854  | Seq. ID | OJ990305_03.9819.C63 |
| Gene No. | 45521  | Strand  | -                    |
| Start    | 435  | End     | 2357                 |
| Name     | OJ990305_03.9819.C63.o1.gs                               | Method  | GENSCAN              |
| Start    | 435  | End     | 2280                 |
| GI       | none   | Score   | .58                  |
| Exons    | 435..581, 1572..1689, 1694..1741, 1805..1936, 2183..2280 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21854   | Seq. ID | OJ990305_03.9819.C63 |
| Gene No.    | 45521   | Strand  | -                    |
| Start       | 435   | End     | 2357                 |
| Name        | OJ990305_03.9819.C63.o2.gp  | Method  | AAT/GAP              |
| Start       | 900   | End     | 1353                 |
| GI          | LIB3431-045-P1-N1-A10   | Score   | 836                  |
| Exons       | 900..1353   |         |                      |
| GI Descrip. | '5441876/dbj AP000367.1 AP000367 0.0e+00 Oryza sativa genomic DNA, chromosome 2, clone:P0437H03 (contig b)' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21854   | Seq. ID | OJ990305_03.9819.C63 |
| Gene No.    | 45521   | Strand  | -                    |
| Start       | 435   | End     | 2357                 |
| Name        | OJ990305_03.9819.C63.o2.np  | Method  | AAT/NAP              |
| Start       | 1457  | End     | 2357                 |
| GI          | 5441880   | Score   | 686                  |
| Exons       | 1457..1689, 1805..1936, 2183..2357  |         |                      |
| GI Descrip. | (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21855   | Seq. ID | OJ990305_03.9819.C64 |
| Gene No.    | 45522   | Strand  | -                    |
| Start       | 1   | End     | 942                  |
| Name        | OJ990305_03.9819.C64.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 704                  |
| GI          | 5441880   | Score   | 911                  |
| Exons       | 1..329, 406..704  |         |                      |
| GI Descrip. | (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21855                      | Seq. ID | OJ990305_03.9819.C64 |
| Gene No. | 45522                      | Strand  | -                    |
| Start    | 1                          | End     | 942                  |
| Name     | OJ990305_03.9819.C64.o1.gs | Method  | GENSCAN              |
| Start    | 71                         | End     | 942                  |
| GI       | none                       | Score   | .87                  |

Exons 71..329, 406..704, 796..942

Seq. No. 21855 Seq. ID OJ990305\_03.9819.C64  
Gene No. 45522 Strand -  
Start 1 End 942  
Name OJ990305\_03.9819.C64.o1.gp Method AAT/GAP  
Start 79 End 578  
GI LIB3475-007-P1-K1-G8 Score 801  
Exons 79..329, 406..578  
GI Descrip. '5441880/dbj|BAA82378.1| 5.0e-75 (AP000367) EST C28952(C62945)  
corresponds to a region of the predicted gene.; Similar to maize  
transposon MuDR mudrA protein. (AC003981) [Oryza sativa]'

Seq. No. 21856 Seq. ID OJ990305\_03.9819.C65  
Gene No. 45523 Strand +  
Start 1 End 3398  
Name OJ990305\_03.9819.C65.o2.np Method AAT/NAP  
Start 1 End 3398  
GI 4206306 Score 661  
Exons 1..76, 1894..3398  
GI Descrip. (AF049110) prpol [Zea mays]

Seq. No. 21856 Seq. ID OJ990305\_03.9819.C65  
Gene No. 45523 Strand +  
Start 1 End 3398  
Name OJ990305\_03.9819.C65.o2.gp Method AAT/GAP  
Start 799 End 1181  
GI uC-osflcyp033a04b1 Score 700  
Exons 799..1181  
GI Descrip. '6016845/dbj|AP000570.1|AP000570 3.0e-59 Oryza sativa genomic  
DNA, chromosome 1, clone:P0711E10'

Seq. No. 21856 Seq. ID OJ990305\_03.9819.C65  
Gene No. 45524 Strand -  
Start 732 End 3398  
Name OJ990305\_03.9819.C65.o1.np Method AAT/NAP  
Start 732 End 3398  
GI 4680186 Score 358  
Exons 732..932, 1771..1824, 3360..3398  
GI Descrip. (AF111709) unknown [Oryza sativa subsp. indica]

Seq. No. 21856 Seq. ID OJ990305\_03.9819.C65  
Gene No. 45524 Strand -  
Start 732 End 3398  
Name OJ990305\_03.9819.C65.o2.tw Method TBLASTX:Wheat  
Start 1316 End 2692  
GI none Score 51  
Exons 1316..1360, 1475..1519, 2357..2692, 2374..2484

Seq. No. 21856 Seq. ID OJ990305\_03.9819.C65  
Gene No. 45524 Strand -  
Start 732 End 3398  
Name OJ990305\_03.9819.C65.o1.tw Method TBLASTX:Wheat  
Start 1950 End 2356  
GI none Score 66  
Exons 1950..2006, 1955..1996, 1985..2173, 2001..2198, 2002..2202,  
2009..2152, 2013..2201, 2219..2356

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21856                              | Seq. ID | OJ990305_03.9819.C65 |
| Gene No. | 45524                              | Strand  | -                    |
| Start    | 732                                | End     | 3398                 |
| Name     | OJ990305_03.9819.C65.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 2004                               | End     | 2215                 |
| GI       | none                               | Score   | 251                  |
| Exons    | 2004..2198, 2009..2152, 2012..2215 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21856                              | Seq. ID | OJ990305_03.9819.C65 |
| Gene No. | 45524                              | Strand  | -                    |
| Start    | 732                                | End     | 3398                 |
| Name     | OJ990305_03.9819.C65.o1.tm         | Method  | TBLASTX:Maize        |
| Start    | 2225                               | End     | 2686                 |
| GI       | none                               | Score   | 516                  |
| Exons    | 2225..2686, 2225..2614, 2560..2685 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21856  | Seq. ID | OJ990305_03.9819.C65 |
| Gene No. | 45524  | Strand  | -                    |
| Start    | 732  | End     | 3398                 |
| Name     | OJ990305_03.9819.C65.o1.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 2372   | End     | 2842                 |
| GI       | none   | Score   | 222                  |
| Exons    | 2372..2653, 2410..2484, 2654..2842, 2698..2829 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21856  | Seq. ID | OJ990305_03.9819.C65 |
| Gene No. | 45524  | Strand  | -                    |
| Start    | 732  | End     | 3398                 |
| Name     | OJ990305_03.9819.C65.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 2992   | End     | 3330                 |
| GI       | none   | Score   | 135                  |
| Exons    | 2992..3144, 2993..3130, 3152..3235, 3162..3215, 3250..3330, 3266..3301 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21857                      | Seq. ID | OJ990305_03.9819.C66 |
| Gene No. | 45525                      | Strand  | -                    |
| Start    | 690                        | End     | 1131                 |
| Name     | OJ990305_03.9819.C66.o1.gs | Method  | GENSCAN              |
| Start    | 690                        | End     | 1131                 |
| GI       | none                       | Score   | .79                  |
| Exons    | 690..861, 961..1131        |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21857                      | Seq. ID | OJ990305_03.9819.C66 |
| Gene No. | 45526                      | Strand  | -                    |
| Start    | 1078                       | End     | 1186                 |
| Name     | OJ990305_03.9819.C66.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 463                        | End     | 711                  |
| GI       | none                       | Score   | 56                   |
| Exons    | 463..711, 577..711         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21857                      | Seq. ID | OJ990305_03.9819.C66 |
| Gene No. | 45526                      | Strand  | -                    |
| Start    | 1078                       | End     | 1186                 |
| Name     | OJ990305_03.9819.C66.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 484                        | End     | 861                  |
| GI       | none                       | Score   | 205                  |
| Exons    | 484..861                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21857  | Seq. ID | OJ990305_03.9819.C66 |
| Gene No.    | 45526  | Strand  | -                    |
| Start       | 1078   | End     | 1186                 |
| Name        | OJ990305_03.9819.C66.o2.np                     | Method  | AAT/NAP              |
| Start       | 1078   | End     | 1186                 |
| GI          | 5042454  | Score   | 84                   |
| Exons       | 1078..1186                                     |         |                      |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21858  | Seq. ID | OJ990305_03.9819.C69 |
| Gene No.    | 45527  | Strand  | +                    |
| Start       | 1  | End     | 701                  |
| Name        | OJ990305_03.9819.C69.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 701                  |
| GI          | 2126090  | Score   | 1100                 |
| Exons       | 1..701   |         |                      |
| GI Descrip. | transposase (insertion sequence IS10) - Escherichia coli<br>gi 455676 bbs 140379 (S67119) transposase [Escherichia coli,<br>LBB84, plasmid pXT107, IS10L/R-1, Peptide<br>PlasmidTransposonInsertionMutant, 402 aa] [Escherichia coli]<br>gi 6634720 gb AAF19728.1 AC012463_2 (AC012463) T2E6.2<br>[Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21858                      | Seq. ID | OJ990305_03.9819.C69 |
| Gene No. | 45527                      | Strand  | +                    |
| Start    | 1                          | End     | 701                  |
| Name     | OJ990305_03.9819.C69.o1.gs | Method  | GENSCAN              |
| Start    | 24                         | End     | 669                  |
| GI       | none                       | Score   | .79                  |
| Exons    | 24..669                    |         |                      |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21859                     | Seq. ID | OJ990205_04.9819.C3 |
| Gene No. | 45528                     | Strand  | -                   |
| Start    | 21                        | End     | 723                 |
| Name     | OJ990205_04.9819.C3.o1.gs | Method  | GENSCAN             |
| Start    | 21                        | End     | 478                 |
| GI       | none                      | Score   | .55                 |
| Exons    | 21..478                   |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21859  | Seq. ID | OJ990205_04.9819.C3 |
| Gene No.    | 45528  | Strand  | -                   |
| Start       | 21   | End     | 723                 |
| Name        | OJ990205_04.9819.C3.o1.np  | Method  | AAT/NAP             |
| Start       | 48   | End     | 723                 |
| GI          | 418604   | Score   | 1035                |
| Exons       | 48..723  |         |                     |
| GI Descrip. | HYPOTHETICAL 35.6 KD PROTEIN IN RPME-TDK INTERGENIC REGION<br>(ORFP) |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21860                     | Seq. ID | OJ990205_04.9819.C4 |
| Gene No. | 45529                     | Strand  | +                   |
| Start    | 196                       | End     | 515                 |
| Name     | OJ990205_04.9819.C4.o1.gs | Method  | GENSCAN             |
| Start    | 196                       | End     | 515                 |
| GI       | none                      | Score   | .82                 |
| Exons    | 196..301, 424..515        |         |                     |

Seq. No. 21861  
Gene No. 45530  
Start 616  
Name OJ990205\_04.9819.C5.o1.gs  
Start 616  
GI none  
Exons 616..712

Seq. ID OJ990205\_04.9819.C5  
Strand -  
End 712  
Method GENSCAN  
End 712  
Score .95

Seq. No. 21861  
Gene No. 45531  
Start 910  
Name OJ990205\_04.9819.C5.o1.np  
Start 910  
GI 4680191  
Exons 910..985, 1076..1141

Seq. ID OJ990205\_04.9819.C5  
Strand -  
End 1141  
Method AAT/NAP  
End 1141  
Score 45

GI Descrip. (AF111710) putative myb-related protein [Oryza sativa subsp. indica]

Seq. No. 21862  
Gene No. 45532  
Start 7  
Name OJ990205\_04.9819.C8.o1.gs  
Start 7  
GI none  
Exons 7..528, 558..692

Seq. ID OJ990205\_04.9819.C8  
Strand -  
End 692  
Method GENSCAN  
End 692  
Score .57

Seq. No. 21863  
Gene No. 45533  
Start 865  
Name OJ990205\_04.9819.C9.o1.gs  
Start 865  
GI none  
Exons 865...962

Seq. ID OJ990205\_04.9819.C9  
Strand -  
End 962  
Method GENSCAN  
End 962  
Score .67

Seq. No. 21864  
Gene No. 45534  
Start 230  
Name OJ990205\_04.9819.C11.o1.gs  
Start 230  
GI none  
Exons 230..385

Seq. ID OJ990205\_04.9819.C11  
Strand -  
End 385  
Method GENSCAN  
End 385  
Score .96

Seq. No. 21865  
Gene No. 45535  
Start 684  
Name OJ990205\_04.9819.C13.o1.gs  
Start 684  
GI none  
Exons 684..749

Seq. ID OJ990205\_04.9819.C13  
Strand +  
End 749  
Method GENSCAN  
End 749  
Score .46

Seq. No. 21865  
Gene No. 45536  
Start 1  
Name OJ990205\_04.9819.C13.o1.np  
Start 1  
GI 267056

Seq. ID OJ990205\_04.9819.C13  
Strand -  
End 719  
Method AAT/NAP  
End 719  
Score 106

Exons 1..71, 222..250, 625..719  
 GI Descrip. SUCROSE SYNTHASE 1 (SUCROSE-UDP GLUCOSYLTRANSFERASE 1)  
 gi|100710|pir||S25526 sucrose synthase (EC 2.4.1.13) - rice  
 gi|20374|emb|CAA78747| (Z15028) sucrose synthase [Oryza sativa]

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45537 Strand +  
 Start 498 End 3530  
 Name OJ990205\_04.9819.C15.o1.gs Method GENSCAN  
 Start 498 End 3530  
 GI none Score .72  
 Exons 498..660, 2983..3098, 3112..3369, 3408..3530

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45538 Strand +  
 Start 11987 End 57365  
 Name OJ990205\_04.9819.C15.o4.gs Method GENSCAN  
 Start 11987 End 21132  
 GI none Score .65  
 Exons 11987..12065, 12899..13028, 13116..13262, 13287..13358,  
 13627..13698, 13778..13849, 14607..14678, 14779..14850,  
 15003..15074, 15319..15390, 15471..15542, 15694..15765,  
 15998..16069, 16147..16218, 16308..16376, 16461..16532,  
 16619..16692, 16780..16908, 17085..17432, 17617..17990,  
 18487..18831, 20845..21132

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45538 Strand +  
 Start 11987 End 57365  
 Name OJ990205\_04.9819.C15.o1.np Method AAT/NAP  
 Start 12820 End 18852  
 GI 1345132 Score 2920  
 Exons 12820..13028, 13116..13187, 13287..13358, 13444..13515,  
 13627..13698, 13778..13849, 14134..14205, 14288..14359,  
 14445..14513, 14607..14678, 14779..14850, 15003..15074,  
 15156..15227, 15319..15390, 15471..15542, 15694..15765,  
 15846..15917, 15998..16069, 16147..16218, 16308..16376,  
 16461..16532, 16619..16692, 16780..16908, 17085..17432,  
 17620..17990, 18487..18852  
 GI Descrip. (U47029) ERECTA [Arabidopsis thaliana] gi|1389566|dbj|BAA11869|  
 (D83257) receptor protein kinase [Arabidopsis thaliana]  
 gi|3075386|gb|AAC14518.1| (AC004484) putative receptor-like  
 protein kinase, ERECTA [Arabidopsis thaliana]

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45538 Strand +  
 Start 11987 End 57365  
 Name OJ990205\_04.9819.C15.o2.gp Method AAT/GAP  
 Start 18911 End 19330  
 GI 4714180 Score 584  
 Exons 18911..19138, 19224..19330

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45538 Strand +  
 Start 11987 End 57365  
 Name OJ990205\_04.9819.C15.o2.np Method AAT/NAP  
 Start 20778 End 57365

GI 6175155 Score 135  
 Exons 20778..20989, 25375..25556, 35780..35945, 41759..41947,  
 57338..57365  
 GI Descrip. (AC010796) putative protein kinase [Arabidopsis thaliana]

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45538 Strand +  
 Start 11987 End 57365  
 Name OJ990205\_04.9819.C15.o7.gs Method GENSCAN  
 Start 45429 End 49971  
 GI none Score .72  
 Exons 45429..45988, 46429..46535, 48841..49016, 49118..49290,  
 49309..49530, 49620..49971

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45538 Strand +  
 Start 11987 End 57365  
 Name OJ990205\_04.9819.C15.o7.gp Method AAT/GAP  
 Start 49991 End 50047  
 GI uC-osf1M202097d10b1 Score 70  
 Exons 49991..50047  
 GI Descrip. '4062935/dbj|AB003495.1|AB003495 3.0e-14 Oryza sativa DNA for  
 dihydroflavonol 4-reductase, complete cds'

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45538 Strand +  
 Start 11987 End 57365  
 Name OJ990205\_04.9819.C15.o8.gs Method GENSCAN  
 Start 51134 End 55567  
 GI none Score .75  
 Exons 51134..51592, 51975..52212, 53660..53989, 54010..54101,  
 54127..54368, 55137..55320, 55406..55567

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45538 Strand +  
 Start 11987 End 57365  
 Name OJ990205\_04.9819.C15.o8.gp Method AAT/GAP  
 Start 51558 End 52165  
 GI none Score 372  
 Exons 51558..51592, 51975..52165

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45538 Strand +  
 Start 11987 End 57365  
 Name OJ990205\_04.9819.C15.o9.gp Method AAT/GAP  
 Start 52363 End 53883  
 GI 569991 Score 624  
 Exons 52363..52470, 53660..53883

Seq. No. 21866 Seq. ID OJ990205\_04.9819.C15  
 Gene No. 45539 Strand +  
 Start 62954 End 66497  
 Name OJ990205\_04.9819.C15.o10.gs Method GENSCAN  
 Start 62954 End 66497  
 GI none Score .77  
 Exons 62954..63038, 63386..63432, 64080..64565, 64669..64804,  
 64903..65039, 65787..66497

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No.    | 45539  | Strand  | +                    |
| Start       | 62954  | End     | 66497                |
| Name        | OJ990205_04.9819.C15.o4.np   | Method  | AAT/NAP              |
| Start       | 63022  | End     | 66394                |
| GI          | 4585873  | Score   | 886                  |
| Exons       | 63022..63128, 64235..64565, 64669..64804, 64903..65039, 65838..66394 |         |                      |
| GI Descrip. | (AC005850) Putative protein kinase [Arabidopsis thaliana]            |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No.    | 45540   | Strand  | +                    |
| Start       | 67417   | End     | 69396                |
| Name        | OJ990205_04.9819.C15.o5.np  | Method  | AAT/NAP              |
| Start       | 67200   | End     | 69396                |
| GI          | 5001454   | Score   | 49                   |
| Exons       | 67200..67243, 69136..69396  |         |                      |
| GI Descrip. | (AC007730) putative non-LTR retroelement reverse transcriptase [Arabidopsis thaliana] |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 21866                       | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45540                       | Strand  | +                    |
| Start    | 67417                       | End     | 69396                |
| Name     | OJ990205_04.9819.C15.o11.gs | Method  | GENSCAN              |
| Start    | 67417                       | End     | 67957                |
| GI       | none                        | Score   | .71                  |
| Exons    | 67417..67618, 67659..67957  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45541  | Strand  | +                    |
| Start    | 75136  | End     | 83078                |
| Name     | OJ990205_04.9819.C15.o13.gs  | Method  | GENSCAN              |
| Start    | 75136  | End     | 80630                |
| GI       | none   | Score   | .7                   |
| Exons    | 75136..75237, 75328..75443, 75460..75880, 76109..76204, 76274..76423, 78433..78587, 78928..79267, 79332..79611, 80162..80291, 80381..80630 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No.    | 45541   | Strand  | +                    |
| Start       | 75136   | End     | 83078                |
| Name        | OJ990205_04.9819.C15.o6.np  | Method  | AAT/NAP              |
| Start       | 77739   | End     | 83078                |
| GI          | 283008  | Score   | 660                  |
| Exons       | 77739..77833, 78208..78336, 78433..78587, 78669..78883, 79239..79638, 80015..80258, 83038..83078      |         |                      |
| GI Descrip. | sucrose synthase (EC 2.4.1.13) - rice gi 20366 emb CAA46017  (X64770) sucrose synthase [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45542   | Strand  | +                    |
| Start    | 84599   | End     | 86723                |
| Name     | OJ990205_04.9819.C15.o15.gs                             | Method  | GENSCAN              |
| Start    | 84599   | End     | 86723                |
| GI       | none  | Score   | .5                   |
| Exons    | 84599..84779, 84851..85013, 85027..85179, 85783..85865, |         |                      |



86632..86723

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21866                      | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45543                      | Strand  | -                    |
| Start    | 4866                       | End     | 5340                 |
| Name     | OJ990205_04.9819.C15.o2.gs | Method  | GENSCAN              |
| Start    | 4866                       | End     | 5340                 |
| GI       | none                       | Score   | .78                  |
| Exons    | 4866..5022, 5330..5340     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21866                              | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45544                              | Strand  | -                    |
| Start    | 7364                               | End     | 9843                 |
| Name     | OJ990205_04.9819.C15.o3.gs         | Method  | GENSCAN              |
| Start    | 7364                               | End     | 9843                 |
| GI       | none                               | Score   | .43                  |
| Exons    | 7364..7465, 9470..9630, 9639..9843 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45545  | Strand  | -                    |
| Start    | 22060  | End     | 25563                |
| Name     | OJ990205_04.9819.C15.o5.gs                             | Method  | GENSCAN              |
| Start    | 22060  | End     | 25563                |
| GI       | none   | Score   | .89                  |
| Exons    | 22060..22227, 22313..22389, 23388..23677, 25310..25563 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45546  | Strand  | -                    |
| Start    | 27734  | End     | 44297                |
| Name     | OJ990205_04.9819.C15.o6.gs   | Method  | GENSCAN              |
| Start    | 27734  | End     | 44297                |
| GI       | none   | Score   | .63                  |
| Exons    | 27734..27805, 27975..28018, 32628..32679, 32758..32832, 32923..32959, 33120..33188, 33602..33704, 33823..33898, 34332..34542, 34642..34993, 35737..35779, 35854..36042, 37276..37334, 38541..38642, 39394..39511, 39957..40064, 40164..40244, 40375..40531, 40617..40734, 40894..40948, 41215..41261, 41777..41867, 43188..43273, 43292..43403, 43816..43873, 44149..44297 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45546  | Strand  | -                    |
| Start    | 27734  | End     | 44297                |
| Name     | OJ990205_04.9819.C15.o4.gp   | Method  | AAT/GAP              |
| Start    | 32054  | End     | 32961                |
| GI       | none   | Score   | 774                  |
| Exons    | 32054..32283, 32481..32525, 32628..32679, 32758..32832, 32923..32961 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45546  | Strand  | -                    |
| Start    | 27734  | End     | 44297                |
| Name     | OJ990205_04.9819.C15.o5.gp   | Method  | AAT/GAP              |
| Start    | 33608  | End     | 36017                |
| GI       | none   | Score   | 2397                 |
| Exons    | 33608..33704, 33823..33898, 34332..34542, 34642..35251, 35737..36017 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No.    | 45546  | Strand  | -                    |
| Start       | 27734  | End     | 44297                |
| Name        | OJ990205_04.9819.C15.o6.gp   | Method  | AAT/GAP              |
| Start       | 37596  | End     | 37693                |
| GI          | uC-osflcyp022c06b2   | Score   | 151                  |
| Exons       | 37596..37693   |         |                      |
| GI Descrip. | '5042437/gb AC007789.1 AC007789 8.0e-25 Oryza sativa BAC T49B20 genomic sequence, complete sequence' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No.    | 45546  | Strand  | -                    |
| Start       | 27734  | End     | 44297                |
| Name        | OJ990205_04.9819.C15.o3.np   | Method  | AAT/NAP              |
| Start       | 39147  | End     | 40984                |
| GI          | 6683811  | Score   | 638                  |
| Exons       | 39147..39223, 39957..40064, 40164..40244, 40375..40531, 40617..40734, 40894..40984 |         |                      |
| GI Descrip. | (AF187062) UMP/CMP kinase a [Oryza sativa]   |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 21866                       | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45547                       | Strand  | -                    |
| Start    | 54417                       | End     | 54578                |
| Name     | OJ990205_04.9819.C15.o10.gp | Method  | AAT/GAP              |
| Start    | 54417                       | End     | 54578                |
| GI       | none                        | Score   | 288                  |
| Exons    | 54417..54578                |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45548  | Strand  | -                    |
| Start    | 57976  | End     | 62079                |
| Name     | OJ990205_04.9819.C15.o9.gs   | Method  | GENSCAN              |
| Start    | 57976  | End     | 62079                |
| GI       | none   | Score   | .62                  |
| Exons    | 57976..58068, 58498..58698, 58835..58954, 60600..60646, 61983..62079 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45549  | Strand  | -                    |
| Start    | 71990  | End     | 74493                |
| Name     | OJ990205_04.9819.C15.o12.gs  | Method  | GENSCAN              |
| Start    | 71990  | End     | 74493                |
| GI       | none   | Score   | .46                  |
| Exons    | 71990..72619, 72663..72855, 72866..73600, 73887..73963, 74422..74493 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o1.tc  | Method  | TBLASTX:Cress        |
| Start    | 12850   | End     | 66023                |
| GI       | none  | Score   | 101                  |
| Exons    | 12850..12960, 12970..13029, 13144..13188, 13173..13379, 13288..13359, 13288..13359, 13444..13509, 13445..13516, 13445..13501, 13627..13713, 13628..13720, 13778..13846, 13778..13849, 13779..13850, 13779..13850, 14135..14239, |         |                      |

14141..14221, 14152..14238, 14250..14366, 14277..14360,  
 14279..14359, 14289..14360, 14356..14394, 14445..14507,  
 14446..14514, 14446..14502, 14469..14513, 14595..14675,  
 14601..14663, 14608..14679, 14779..14853, 14780..14851,  
 15003..15059, 15004..15075, 15148..15228, 15180..15230,  
 15305..15391, 15308..15391, 15319..15393, 15472..15540,  
 15477..15563, 15483..15512, 15725..15766, 15847..15894,  
 15999..16070, 16148..16219, 16294..16377, 16449..16532,  
 16456..16530, 16617..16676, 16778..16906, 16784..16906,  
 16803..16922, 17070..17432, 17084..17431, 17098..17433,  
 17099..17452, 17610..17993, 17612..17653, 17705..17983,  
 17720..17995, 18483..18641, 18486..18635, 18487..18705,  
 18493..18684, 18718..18747, 18784..18855, 18798..18854,  
 64914..65000, 64977..65039, 65898..66023

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o5.ts   | Method  | TBLASTX:Soybean      |
| Start    | 13631  | End     | 16532                |
| GI       | none   | Score   | 66                   |
| Exons    | 13631..13720, 14250..14366, 14458..14511, 14779..14853,<br>14780..14851, 15003..15074, 15004..15075, 15016..15084,<br>15148..15228, 15160..15219, 15180..15230, 15308..15391,<br>15319..15390, 15472..15537, 15480..15545, 15841..15897,<br>15999..16070, 16002..16061, 16142..16210, 16148..16219,<br>16294..16377, 16317..16367, 16432..16530, 16463..16531,<br>16464..16532 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 14438  | End     | 15888                |
| GI       | none   | Score   | 69                   |
| Exons    | 14438..14512, 14444..14512, 14446..14514, 14469..14513,<br>14595..14675, 14602..14655, 14605..14664, 14608..14679,<br>14625..14708, 14768..14833, 14779..14853, 14780..14851,<br>14782..14853, 14791..14820, 14983..15075, 14998..15072,<br>15003..15074, 15004..15075, 15009..15065, 15148..15228,<br>15149..15229, 15157..15237, 15180..15206, 15308..15388,<br>15319..15396, 15454..15540, 15471..15563, 15471..15563,<br>15694..15762, 15696..15761, 15703..15765, 15844..15888,<br>15847..15888 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 15891  | End     | 66026                |
| GI       | none   | Score   | 98                   |
| Exons    | 15891..15917, 15999..16070, 16016..16069, 16144..16227,<br>16148..16219, 16294..16377, 16308..16388, 16449..16532,<br>16456..16530, 16461..16535, 16616..16681, 16617..16691,<br>16618..16692, 16619..16693, 16769..16912, 16778..16903,<br>16786..16908, 17079..17354, 17082..17354, 17083..17358,<br>17084..17359, 17345..17434, 17353..17433, 17578..17988, |         |                      |

17619..17993, 17705..17989, 18486..18662, 18486..18713,  
 18487..18699, 18488..18700, 64917..65000, 64977..65039,  
 65835..65876, 65898..66026, 65915..65998, 65982..66026

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 17070  | End     | 66026                |
| GI       | none   | Score   | 191                  |
| Exons    | 17070..17432, 17071..17433, 17072..17434, 17096..17434,<br>17610..17969, 17612..17650, 17705..17971, 64917..65000,<br>64977..65036, 65898..66026 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o2.tw  | Method  | TBLASTX:Wheat        |
| Start    | 17324   | End     | 65012                |
| GI       | none  | Score   | 63                   |
| Exons    | 17324..17416, 17640..17723, 64422..64481, 64425..64493,<br>64427..64507, 64497..64562, 64505..64564, 64669..64692,<br>64692..64805, 64692..64802, 64693..64806, 64902..65012,<br>64904..65011 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o1.tw  | Method  | TBLASTX:Wheat        |
| Start    | 17763   | End     | 66230                |
| GI       | none  | Score   | 41                   |
| Exons    | 17763..17804, 17823..17966, 17843..17950, 65826..66230,<br>65837..65998, 65952..66137 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866                                    | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550                                    | Strand  | -                    |
| Start    | 82694                                    | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o3.ts               | Method  | TBLASTX:Soybean      |
| Start    | 18486                                    | End     | 18855                |
| GI       | none                                     | Score   | 250                  |
| Exons    | 18486..18635, 18487..18678, 18787..18855 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o9.tm  | Method  | TBLASTX:Maize        |
| Start    | 31872   | End     | 34379                |
| GI       | none  | Score   | 40                   |
| Exons    | 31872..31907, 31935..31985, 31939..31986, 32004..32039,<br>32010..32063, 32117..32164, 32126..32158, 32178..32282,<br>32192..32281, 32199..32285, 32480..32524, 32480..32542,<br>32627..32680, 32629..32679, 32756..32833, 32758..32838,<br>32762..32833, 32920..32964, 32924..32965, 32924..32965,<br>33119..33187, 33119..33208, 33120..33191, 33585..33728,<br>33587..33700, 33588..33704, 33619..33714, 33822..33899,<br>33824..33898, 34326..34379, 34332..34373 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o6.tm  | Method  | TBLASTX:Maize        |
| Start    | 34756   | End     | 35163                |
| GI       | none  | Score   | 39                   |
| Exons    | 34756..34791, 34767..34790, 34787..35137, 34796..35011,<br>34797..35153, 34797..35153, 34798..35163, 34948..35163 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o5.tm  | Method  | TBLASTX:Maize        |
| Start    | 39141   | End     | 40957                |
| GI       | none  | Score   | 72                   |
| Exons    | 39141..39224, 39166..39225, 39167..39226, 39170..39226,<br>39954..40067, 39958..40065, 40128..40238, 40162..40242,<br>40168..40245, 40370..40531, 40375..40533, 40393..40530,<br>40395..40532, 40412..40534, 40616..40708, 40617..40736,<br>40617..40739, 40618..40737, 40863..40940, 40885..40944,<br>40892..40957, 40893..40949 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o4.tc   | Method  | TBLASTX:Cress        |
| Start    | 39954  | End     | 40736                |
| GI       | none   | Score   | 94                   |
| Exons    | 39954..40067, 39958..40065, 40142..40228, 40163..40225,<br>40164..40238, 40165..40245, 40376..40531, 40393..40530,<br>40616..40708, 40617..40736, 40659..40733 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o4.tw  | Method  | TBLASTX:Wheat        |
| Start    | 39954   | End     | 40434                |
| GI       | none  | Score   | 141                  |
| Exons    | 39954..40067, 39958..40065, 40128..40238, 40158..40235,<br>40168..40245, 40376..40426, 40393..40434 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o6.ts  | Method  | TBLASTX:Soybean      |
| Start    | 40179   | End     | 40736                |
| GI       | none  | Score   | 66                   |
| Exons    | 40179..40238, 40183..40239, 40376..40531, 40393..40530,<br>40616..40708, 40617..40736, 40626..40736 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o7.ts                              | Method  | TBLASTX:Soybean      |
| Start    | 45574   | End     | 52031                |
| GI       | none  | Score   | 179                  |
| Exons    | 45574..45774, 45600..45767, 45916..45975, 45985..46044, |         |                      |

51125..51238, 51248..51349, 51320..51490, 51473..51532,  
51963..52031

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 45580  | End     | 51547                |
| GI       | none   | Score   | 214                  |
| Exons    | 45580..45840, 45603..45770, 45922..45990, 51145..51225,<br>51149..51247, 51218..51241, 51242..51346, 51265..51345,<br>51350..51397, 51401..51487, 51404..51484, 51479..51547 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o5.tc  | Method  | TBLASTX:Cress        |
| Start    | 46298   | End     | 52395                |
| GI       | none  | Score   | 55                   |
| Exons    | 46298..46345, 46346..46534, 51969..52211, 51977..52207,<br>52297..52395 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o8.tm   | Method  | TBLASTX:Maize        |
| Start    | 49247  | End     | 54246                |
| GI       | none   | Score   | 53                   |
| Exons    | 49247..49291, 49247..49288, 49255..49293, 49354..49491,<br>49358..49486, 49401..49502, 49617..49766, 49618..49767,<br>53798..53851, 53891..54001, 54093..54245, 54097..54246 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 64335  | End     | 66305                |
| GI       | none   | Score   | 192                  |
| Exons    | 64335..64493, 64367..64492, 64497..64562, 64511..64564,<br>64669..64782, 64671..64805, 64672..64803, 65837..65896,<br>65838..65894, 66060..66272, 66270..66305 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21866   | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550   | Strand  | -                    |
| Start    | 82694   | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o2.tc  | Method  | TBLASTX:Cress        |
| Start    | 64353   | End     | 66257                |
| GI       | none  | Score   | 133                  |
| Exons    | 64353..64478, 64364..64477, 64511..64564, 64512..64562,<br>64671..64802, 64672..64803, 65838..65894, 66060..66257 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21866                      | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550                      | Strand  | -                    |
| Start    | 82694                      | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 64409                      | End     | 64805                |
| GI       | none                       | Score   | 182                  |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Exons    | 64409..64564, 64413..64562, 64668..64805, 64669..64803   |         |                      |
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o10.tm  | Method  | TBLASTX:Maize        |
| Start    | 66033  | End     | 66275                |
| GI       | none   | Score   | 212                  |
| Exons    | 66033..66275, 66060..66272   |         |                      |
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o11.tm  | Method  | TBLASTX:Maize        |
| Start    | 69204  | End     | 69578                |
| GI       | none   | Score   | 123                  |
| Exons    | 69204..69320, 69205..69318, 69311..69448, 69513..69578   |         |                      |
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 77715  | End     | 80435                |
| GI       | none   | Score   | 98                   |
| Exons    | 77715..77834, 77723..77836, 77726..77830, 77739..77834, 78201..78266, 78206..78271, 78206..78271, 78269..78331, 78270..78332, 78271..78336, 78412..78474, 78433..78474, 78475..78588, 78475..78588, 78628..78846, 78680..78766, 78754..78852, 80014..80124, 80022..80123, 80159..80221, 80160..80198, 80202..80231, 80203..80232, 80222..80290, 80235..80282, 80378..80428, 80379..80435 |         |                      |
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 77729  | End     | 78587                |
| GI       | none   | Score   | 71                   |
| Exons    | 77729..77827, 77729..77836, 77733..77834, 78206..78271, 78206..78271, 78270..78332, 78271..78336, 78412..78474, 78431..78475, 78444..78587, 78475..78582, 78476..78583   |         |                      |
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |
| Start    | 82694  | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o4.ts   | Method  | TBLASTX:Soybean      |
| Start    | 78200  | End     | 80435                |
| GI       | none   | Score   | 78                   |
| Exons    | 78200..78322, 78205..78267, 78379..78453, 78432..78467, 78433..78474, 78451..78585, 78475..78585, 78674..78721, 78679..78720, 78718..78753, 78754..78852, 78759..78836, 80014..80082, 80089..80124, 80159..80224, 80182..80232, 80208..80231, 80235..80291, 80236..80286, 80379..80435, 80380..80427   |         |                      |
| Seq. No. | 21866  | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550  | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 82694  | End    | 83791         |
| Name  | OJ990205_04.9819.C15.o3.tc   | Method | TBLASTX:Cress |
| Start | 78409  | End    | 78873         |
| GI    | none   | Score  | 65            |
| Exons | 78409..78474, 78444..78584, 78475..78585, 78682..78753, 78683..78754, 78754..78873, 78759..78851 |        |               |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 21866                       | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550                       | Strand  | -                    |
| Start    | 82694                       | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o14.gs | Method  | GENSCAN              |
| Start    | 82694                       | End     | 83613                |
| GI       | none                        | Score   | .93                  |
| Exons    | 82694..82812, 83157..83613  |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 21866                       | Seq. ID | OJ990205_04.9819.C15 |
| Gene No. | 45550                       | Strand  | -                    |
| Start    | 82694                       | End     | 83791                |
| Name     | OJ990205_04.9819.C15.o12.gp | Method  | AAT/GAP              |
| Start    | 83183                       | End     | 83791                |
| GI       | none                        | Score   | 1094                 |
| Exons    | 83183..83791                |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21867                      | Seq. ID | OJ990205_04.9819.C16 |
| Gene No. | 45551                      | Strand  | +                    |
| Start    | 134                        | End     | 1448                 |
| Name     | OJ990205_04.9819.C16.o1.gs | Method  | GENSCAN              |
| Start    | 134                        | End     | 1448                 |
| GI       | none                       | Score   | .59                  |
| Exons    | 134..189, 1402..1448       |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21867  | Seq. ID | OJ990205_04.9819.C16 |
| Gene No.    | 45552  | Strand  | +                    |
| Start       | 5591   | End     | 5776                 |
| Name        | OJ990205_04.9819.C16.o1.gp   | Method  | AAT/GAP              |
| Start       | 5591   | End     | 5776                 |
| GI          | 3106638  | Score   | 331                  |
| Exons       | 5591..5776   |         |                      |
| GI Descrip. | 5257255/dbj AP000364.1 AP000364 4.0e-18 Oryza sativa genomic DNA, chromosome 8, clone:P0026F07 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21867                              | Seq. ID | OJ990205_04.9819.C16 |
| Gene No. | 45553                              | Strand  | -                    |
| Start    | 2762                               | End     | 6387                 |
| Name     | OJ990205_04.9819.C16.o2.gs         | Method  | GENSCAN              |
| Start    | 2762                               | End     | 6387                 |
| GI       | none                               | Score   | .54                  |
| Exons    | 2762..2939, 5959..6126, 6323..6387 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21868                      | Seq. ID | OJ990205_04.9819.C26 |
| Gene No. | 45554                      | Strand  | -                    |
| Start    | 268                        | End     | 451                  |
| Name     | OJ990205_04.9819.C26.o1.gs | Method  | GENSCAN              |
| Start    | 268                        | End     | 451                  |
| GI       | none                       | Score   | .62                  |
| Exons    | 268..451                   |         |                      |



|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21869                      | Seq. ID | OJ990205_04.9819.C29 |
| Gene No. | 45555                      | Strand  | -                    |
| Start    | 449                        | End     | 513                  |
| Name     | OJ990205_04.9819.C29.ol.gs | Method  | GENSCAN              |
| Start    | 449                        | End     | 513                  |
| GI       | none                       | Score   | .9                   |
| Exons    | 449..513                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21870                      | Seq. ID | OJ990205_04.9819.C31 |
| Gene No. | 45556                      | Strand  | -                    |
| Start    | 253                        | End     | 611                  |
| Name     | OJ990205_04.9819.C31.ol.gs | Method  | GENSCAN              |
| Start    | 253                        | End     | 602                  |
| GI       | none                       | Score   | .8                   |
| Exons    | 253..389, 488..602         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21870                                  | Seq. ID | OJ990205_04.9819.C31 |
| Gene No. | 45556                                  | Strand  | -                    |
| Start    | 253                                    | End     | 611                  |
| Name     | OJ990205_04.9819.C31.ol.tc             | Method  | TBLASTX:Cress        |
| Start    | 256                                    | End     | 611                  |
| GI       | none                                   | Score   | 83                   |
| Exons    | 256..375, 257..370, 489..611, 490..609 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21870                                  | Seq. ID | OJ990205_04.9819.C31 |
| Gene No. | 45556                                  | Strand  | -                    |
| Start    | 253                                    | End     | 611                  |
| Name     | OJ990205_04.9819.C31.ol.tm             | Method  | TBLASTX:Maize        |
| Start    | 256                                    | End     | 611                  |
| GI       | none                                   | Score   | 132                  |
| Exons    | 256..381, 257..382, 487..609, 489..611 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21870                                  | Seq. ID | OJ990205_04.9819.C31 |
| Gene No. | 45556                                  | Strand  | -                    |
| Start    | 253                                    | End     | 611                  |
| Name     | OJ990205_04.9819.C31.ol.ts             | Method  | TBLASTX:Soybean      |
| Start    | 256                                    | End     | 611                  |
| GI       | none                                   | Score   | 145                  |
| Exons    | 256..381, 257..382, 487..609, 489..611 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21870  | Seq. ID | OJ990205_04.9819.C31 |
| Gene No. | 45556  | Strand  | -                    |
| Start    | 253  | End     | 611                  |
| Name     | OJ990205_04.9819.C31.ol.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 280  | End     | 600                  |
| GI       | none   | Score   | 129                  |
| Exons    | 280..390, 281..388, 485..583, 486..599, 487..600, 490..600 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21871                      | Seq. ID | OJ990205_04.9819.C32 |
| Gene No. | 45557                      | Strand  | +                    |
| Start    | 62                         | End     | 391                  |
| Name     | OJ990205_04.9819.C32.ol.gs | Method  | GENSCAN              |
| Start    | 62                         | End     | 391                  |
| GI       | none                       | Score   | .95                  |
| Exons    | 62..138, 224..391          |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21872 | Seq. ID | OJ990205_04.9819.C33 |
|----------|-------|---------|----------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 45558  | Strand | -             |
| Start    | 519  | End    | 659           |
| Name     | OJ990205_04.9819.C33.ol.tm   | Method | TBLASTX:Maize |
| Start    | 499  | End    | 659           |
| GI       | none   | Score  | 94            |
| Exons    | 499..570, 516..605, 516..605, 517..606, 583..657, 594..659, 609..659 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21872                      | Seq. ID | OJ990205_04.9819.C33 |
| Gene No. | 45558                      | Strand  | -                    |
| Start    | 519                        | End     | 659                  |
| Name     | OJ990205_04.9819.C33.ol.gs | Method  | GENSCAN              |
| Start    | 519                        | End     | 655                  |
| GI       | none                       | Score   | .99                  |
| Exons    | 519..655                   |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21872                        | Seq. ID | OJ990205_04.9819.C33 |
| Gene No. | 45558                        | Strand  | -                    |
| Start    | 519                          | End     | 659                  |
| Name     | OJ990205_04.9819.C33.ol.tc   | Method  | TBLASTX:Cress        |
| Start    | 522                          | End     | 650                  |
| GI       | none                         | Score   | 140                  |
| Exons    | 522..647, 523..648, 528..650 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21872                      | Seq. ID | OJ990205_04.9819.C33 |
| Gene No. | 45558                      | Strand  | -                    |
| Start    | 519                        | End     | 659                  |
| Name     | OJ990205_04.9819.C33.ol.ts | Method  | TBLASTX:Soybean      |
| Start    | 522                        | End     | 648                  |
| GI       | none                       | Score   | 145                  |
| Exons    | 522..647, 523..648         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21872                      | Seq. ID | OJ990205_04.9819.C33 |
| Gene No. | 45558                      | Strand  | -                    |
| Start    | 519                        | End     | 659                  |
| Name     | OJ990205_04.9819.C33.ol.tw | Method  | TBLASTX:Wheat        |
| Start    | 546                        | End     | 656                  |
| GI       | none                       | Score   | 129                  |
| Exons    | 546..656, 547..654         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21873                      | Seq. ID | OJ990205_04.9819.C41 |
| Gene No. | 45559                      | Strand  | +                    |
| Start    | 866                        | End     | 941                  |
| Name     | OJ990205_04.9819.C41.ol.gs | Method  | GENSCAN              |
| Start    | 866                        | End     | 941                  |
| GI       | none                       | Score   | .43                  |
| Exons    | 866..941                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21874                      | Seq. ID | OJ990205_04.9819.C42 |
| Gene No. | 45560                      | Strand  | +                    |
| Start    | 706                        | End     | 1342                 |
| Name     | OJ990205_04.9819.C42.ol.ts | Method  | TBLASTX:Soybean      |
| Start    | 703                        | End     | 942                  |
| GI       | none                       | Score   | 213                  |
| Exons    | 703..942                   |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21874 | Seq. ID | OJ990205_04.9819.C42 |
|----------|-------|---------|----------------------|

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 45560  | Strand  | +                    |
| Start       | 706  | End     | 1342                 |
| Name        | OJ990205_04.9819.C42.ol.gs   | Method  | GENSCAN              |
| Start       | 706  | End     | 1296                 |
| GI          | none   | Score   | .88                  |
| Exons       | 706..1089, 1220..1296  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21874  | Seq. ID | OJ990205_04.9819.C42 |
| Gene No.    | 45560  | Strand  | +                    |
| Start       | 706  | End     | 1342                 |
| Name        | OJ990205_04.9819.C42.ol.tm   | Method  | TBLASTX:Maize        |
| Start       | 856  | End     | 1342                 |
| GI          | none   | Score   | 120                  |
| Exons       | 856..972, 856..972, 934..1086, 983..1090, 1008..1091, 1053..1091, 1215..1337, 1216..1341, 1219..1341, 1220..1342 |         |                      |
|             |  |         |                      |
| Seq. No.    | 21874  | Seq. ID | OJ990205_04.9819.C42 |
| Gene No.    | 45560  | Strand  | +                    |
| Start       | 706  | End     | 1342                 |
| Name        | OJ990205_04.9819.C42.ol.gp   | Method  | AAT/GAP              |
| Start       | 973  | End     | 1342                 |
| GI          | none   | Score   | 412                  |
| Exons       | 973..1089, 1220..1342  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21875  | Seq. ID | OJ990205_04.9819.C43 |
| Gene No.    | 45561  | Strand  | -                    |
| Start       | 158  | End     | 772                  |
| Name        | OJ990205_04.9819.C43.ol.gs   | Method  | GENSCAN              |
| Start       | 158  | End     | 772                  |
| GI          | none   | Score   | .81                  |
| Exons       | 158..277, 635..772   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21876  | Seq. ID | OJ990205_04.9819.C44 |
| Gene No.    | 45562  | Strand  | -                    |
| Start       | 87   | End     | 379                  |
| Name        | OJ990205_04.9819.C44.ol.gs   | Method  | GENSCAN              |
| Start       | 87   | End     | 379                  |
| GI          | none   | Score   | .58                  |
| Exons       | 87..379  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21877  | Seq. ID | OJ990205_04.9819.C48 |
| Gene No.    | 45563  | Strand  | +                    |
| Start       | 1  | End     | 727                  |
| Name        | OJ990205_04.9819.C48.ol.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 727                  |
| GI          | 2829923  | Score   | 215                  |
| Exons       | 1..128, 351..727   |         |                      |
| GI Descrip. | (AC002291) Similar to uridylyl transferases [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21877  | Seq. ID | OJ990205_04.9819.C48 |
| Gene No.    | 45563  | Strand  | +                    |
| Start       | 1  | End     | 727                  |
| Name        | OJ990205_04.9819.C48.ol.tc   | Method  | TBLASTX:Cress        |
| Start       | 388  | End     | 649                  |
| GI          | none   | Score   | 265                  |
| Exons       | 388..600, 389..649   |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21877                        | Seq. ID | OJ990205_04.9819.C48 |
| Gene No. | 45563                        | Strand  | +                    |
| Start    | 1                            | End     | 727                  |
| Name     | OJ990205_04.9819.C48.ol.tm   | Method  | TBLASTX:Maize        |
| Start    | 394                          | End     | 655                  |
| GI       | none                         | Score   | 206                  |
| Exons    | 394..597, 398..655, 521..619 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21877                      | Seq. ID | OJ990205_04.9819.C48 |
| Gene No. | 45563                      | Strand  | +                    |
| Start    | 1                          | End     | 727                  |
| Name     | OJ990205_04.9819.C48.ol.ts | Method  | TBLASTX:Soybean      |
| Start    | 395                        | End     | 649                  |
| GI       | none                       | Score   | 235                  |
| Exons    | 395..649                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21877                      | Seq. ID | OJ990205_04.9819.C48 |
| Gene No. | 45563                      | Strand  | +                    |
| Start    | 1                          | End     | 727                  |
| Name     | OJ990205_04.9819.C48.ol.gs | Method  | GENSCAN              |
| Start    | 407                        | End     | 600                  |
| GI       | none                       | Score   | .81                  |
| Exons    | 407..600                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21878                      | Seq. ID | OJ990205_04.9819.C49 |
| Gene No. | 45564                      | Strand  | -                    |
| Start    | 205                        | End     | 571                  |
| Name     | OJ990205_04.9819.C49.ol.gs | Method  | GENSCAN              |
| Start    | 205                        | End     | 571                  |
| GI       | none                       | Score   | .49                  |
| Exons    | 205..428, 473..571         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21879  | Seq. ID | OJ990205_04.9819.C50 |
| Gene No.    | 45565  | Strand  | +                    |
| Start       | 20   | End     | 850                  |
| Name        | OJ990205_04.9819.C50.ol.np   | Method  | AAT/NAP              |
| Start       | 20   | End     | 850                  |
| GI          | 267056   | Score   | 392                  |
| Exons       | 20..251, 348..502, 584..850  |         |                      |
| GI Descrip. | SUCROSE SYNTHASE 1 (SUCROSE-UDP GLUCOSYLTRANSFERASE 1)<br>gi 100710 pir  S25526 sucrose synthase (EC 2.4.1.13) - rice<br>gi 20374 emb CAA78747  (Z15028) sucrose synthase [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21879  | Seq. ID | OJ990205_04.9819.C50 |
| Gene No. | 45566  | Strand  | -                    |
| Start    | 270  | End     | 770                  |
| Name     | OJ990205_04.9819.C50.ol.tw   | Method  | TBLASTX:Wheat        |
| Start    | 165  | End     | 502                  |
| GI       | none   | Score   | 79                   |
| Exons    | 165..254, 186..251, 327..389, 346..390, 359..502, 390..497, 391..498 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21879                      | Seq. ID | OJ990205_04.9819.C50 |
| Gene No. | 45566                      | Strand  | -                    |
| Start    | 270                        | End     | 770                  |
| Name     | OJ990205_04.9819.C50.ol.tm | Method  | TBLASTX:Maize        |

|       |  |       |     |
|-------|--|-------|-----|
| Start | 185  | End   | 767 |
| GI    | none   | Score | 81  |
| Exons | 185..247, 186..251, 186..254, 327..389, 348..389, 359..502, 390..503, 390..503, 391..504, 594..668, 595..681, 595..666, 669..767, 669..761 |       |     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21879                      | Seq. ID | OJ990205_04.9819.C50 |
| Gene No. | 45566                      | Strand  | -                    |
| Start    | 270                        | End     | 770                  |
| Name     | OJ990205_04.9819.C50.ol.gs | Method  | GENSCAN              |
| Start    | 270                        | End     | 755                  |
| GI       | none                       | Score   | .42                  |
| Exons    | 270..412, 587..755         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21879  | Seq. ID | OJ990205_04.9819.C50 |
| Gene No. | 45566  | Strand  | -                    |
| Start    | 270  | End     | 770                  |
| Name     | OJ990205_04.9819.C50.ol.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 324  | End     | 767                  |
| GI       | none   | Score   | 65                   |
| Exons    | 324..389, 359..499, 390..500, 598..669, 669..767, 674..766 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21879  | Seq. ID | OJ990205_04.9819.C50 |
| Gene No. | 45566  | Strand  | -                    |
| Start    | 270  | End     | 770                  |
| Name     | OJ990205_04.9819.C50.ol.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 348  | End     | 770                  |
| GI       | none   | Score   | 55                   |
| Exons    | 348..389, 365..499, 390..503, 393..503, 595..681, 669..770 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21880   | Seq. ID | OJ990205_04.9819.C51 |
| Gene No.    | 45567   | Strand  | +                    |
| Start       | 1   | End     | 565                  |
| Name        | OJ990205_04.9819.C51.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 562                  |
| GI          | 137940  | Score   | 975                  |
| Exons       | 1..562  |         |                      |
| GI Descrip. | REPLICATION PROTEIN 15 gi 75892 pir  ORBP15 replication protein 15 - phage phi-80 gi 14807 emb CAA31474  (X13065) gene 15 (AA 1 - 302) [Bacteriophage phi-80] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21880                      | Seq. ID | OJ990205_04.9819.C51 |
| Gene No. | 45567                      | Strand  | +                    |
| Start    | 1                          | End     | 565                  |
| Name     | OJ990205_04.9819.C51.ol.gs | Method  | GENSCAN              |
| Start    | 75                         | End     | 565                  |
| GI       | none                       | Score   | .92                  |
| Exons    | 75..565                    |         |                      |

|             |                                       |         |                      |
|-------------|---------------------------------------|---------|----------------------|
| Seq. No.    | 21880                                 | Seq. ID | OJ990205_04.9819.C51 |
| Gene No.    | 45568                                 | Strand  | +                    |
| Start       | 562                                   | End     | 648                  |
| Name        | OJ990205_04.9819.C51.o2.np            | Method  | AAT/NAP              |
| Start       | 562                                   | End     | 648                  |
| GI          | 75894                                 | Score   | 148                  |
| Exons       | 562..648                              |         |                      |
| GI Descrip. | replication protein 14 - phage phi-80 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21881                      | Seq. ID | OJ990205_04.9819.C52 |
| Gene No. | 45569                      | Strand  | -                    |
| Start    | 560                        | End     | 662                  |
| Name     | OJ990205_04.9819.C52.ol.gs | Method  | GENSCAN              |
| Start    | 560                        | End     | 662                  |
| GI       | none                       | Score   | .53                  |
| Exons    | 560..662                   |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21882                        | Seq. ID | OJ990205_04.9819.C54 |
| Gene No. | 45570                        | Strand  | -                    |
| Start    | 331                          | End     | 642                  |
| Name     | OJ990205_04.9819.C54.ol.tm   | Method  | TBLASTX:Maize        |
| Start    | 283                          | End     | 550                  |
| GI       | none                         | Score   | 270                  |
| Exons    | 283..534, 293..532, 293..550 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21882                      | Seq. ID | OJ990205_04.9819.C54 |
| Gene No. | 45570                      | Strand  | -                    |
| Start    | 331                        | End     | 642                  |
| Name     | OJ990205_04.9819.C54.ol.ts | Method  | TBLASTX:Soybean      |
| Start    | 302                        | End     | 556                  |
| GI       | none                       | Score   | 135                  |
| Exons    | 302..556, 310..531         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21882                      | Seq. ID | OJ990205_04.9819.C54 |
| Gene No. | 45570                      | Strand  | -                    |
| Start    | 331                        | End     | 642                  |
| Name     | OJ990205_04.9819.C54.ol.gs | Method  | GENSCAN              |
| Start    | 331                        | End     | 642                  |
| GI       | none                       | Score   | .42                  |
| Exons    | 331..528, 628..642         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21883  | Seq. ID | OJ990205_04.9819.C55 |
| Gene No.    | 45571  | Strand  | +                    |
| Start       | 174  | End     | 303                  |
| Name        | OJ990205_04.9819.C55.ol.np                     | Method  | AAT/NAP              |
| Start       | 174  | End     | 303                  |
| GI          | 6006367  | Score   | 51                   |
| Exons       | 174..303                                       |         |                      |
| GI Descrip. | (AP000559) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21884                      | Seq. ID | OJ990205_04.9819.C56 |
| Gene No. | 45572                      | Strand  | -                    |
| Start    | 236                        | End     | 462                  |
| Name     | OJ990205_04.9819.C56.ol.gs | Method  | GENSCAN              |
| Start    | 236                        | End     | 462                  |
| GI       | none                       | Score   | .9                   |
| Exons    | 236..338, 404..462         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21885                      | Seq. ID | OJ990205_04.9819.C57 |
| Gene No. | 45573                      | Strand  | -                    |
| Start    | 411                        | End     | 532                  |
| Name     | OJ990205_04.9819.C57.ol.gs | Method  | GENSCAN              |
| Start    | 411                        | End     | 532                  |
| GI       | none                       | Score   | .55                  |
| Exons    | 411..532                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21886  | Seq. ID | OJ990205_04.9819.C59 |
| Gene No.    | 45574  | Strand  | +                    |
| Start       | 1  | End     | 731                  |
| Name        | OJ990205_04.9819.C59.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 731                  |
| GI          | 1345132  | Score   | 64                   |
| Exons       | 1..98, 165..238, 318..388, 673..731  |         |                      |
| GI Descrip. | (U47029) ERECTA [Arabidopsis thaliana] gi 1389566 dbj BAA11869 <br>(D83257) receptor protein kinase [Arabidopsis thaliana]<br>gi 3075386 gb AAC14518.1  (AC004484) putative receptor-like<br>protein kinase, ERECTA [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21886                      | Seq. ID | OJ990205_04.9819.C59 |
| Gene No. | 45574                      | Strand  | +                    |
| Start    | 1                          | End     | 731                  |
| Name     | OJ990205_04.9819.C59.o1.gs | Method  | GENSCAN              |
| Start    | 106                        | End     | 271                  |
| GI       | none                       | Score   | .67                  |
| Exons    | 106..271                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21887                      | Seq. ID | OJ990205_04.9819.C60 |
| Gene No. | 45575                      | Strand  | +                    |
| Start    | 457                        | End     | 537                  |
| Name     | OJ990205_04.9819.C60.o1.gs | Method  | GENSCAN              |
| Start    | 457                        | End     | 537                  |
| GI       | none                       | Score   | .94                  |
| Exons    | 457..537                   |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21888                                     | Seq. ID | OJ990205_04.9819.C61 |
| Gene No.    | 45576                                     | Strand  | -                    |
| Start       | 1   | End     | 1410                 |
| Name        | OJ990205_04.9819.C61.o1.np                | Method  | AAT/NAP              |
| Start       | 1   | End     | 1410                 |
| GI          | 4234846                                   | Score   | 264                  |
| Exons       | 1..50, 999..1410                          |         |                      |
| GI Descrip. | (AF082130) gag-pol polyprotein [Zea mays] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21889                                     | Seq. ID | OJ990205_04.9819.C62 |
| Gene No.    | 45577                                     | Strand  | +                    |
| Start       | 1   | End     | 4707                 |
| Name        | OJ990205_04.9819.C62.o1.np                | Method  | AAT/NAP              |
| Start       | 1   | End     | 1423                 |
| GI          | 4234846                                   | Score   | 428                  |
| Exons       | 1..678, 1372..1423                        |         |                      |
| GI Descrip. | (AF082130) gag-pol polyprotein [Zea mays] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21889                                       | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45577                                       | Strand  | +                    |
| Start    | 1   | End     | 4707                 |
| Name     | OJ990205_04.9819.C62.o1.gs                  | Method  | GENSCAN              |
| Start    | 99  | End     | 4707                 |
| GI       | none  | Score   | .84                  |
| Exons    | 99..284, 2334..2425, 2541..2710, 4149..4707 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21889 | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45577 | Strand  | +                    |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 1  | End    | 4707    |
| Name        | OJ990205_04.9819.C62.o1.gp                           | Method | AAT/GAP |
| Start       | 2319   | End    | 2910    |
| GI          | 16974_1.R1084  | Score  | 834     |
| Exons       | 2319..2425, 2541..2910                               |        |         |
| GI Descrip. | '4097585 9.0e-13 (U64925) NTGP4 [Nicotiana tabacum]' |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21889                      | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45577                      | Strand  | +                    |
| Start    | 1                          | End     | 4707                 |
| Name     | OJ990205_04.9819.C62.o2.gp | Method  | AAT/GAP              |
| Start    | 3907                       | End     | 4250                 |
| GI       | none                       | Score   | 618                  |
| Exons    | 3907..4250                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No.    | 45578  | Strand  | -                    |
| Start       | 1698   | End     | 2229                 |
| Name        | OJ990205_04.9819.C62.o2.np                   | Method  | AAT/NAP              |
| Start       | 1698   | End     | 2229                 |
| GI          | 2792151                                      | Score   | 197                  |
| Exons       | 1698..1828, 1913..2229                       |         |                      |
| GI Descrip. | (Y16182) hypothetical protein [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 65   | End     | 664                  |
| GI       | none   | Score   | 165                  |
| Exons    | 65..199, 78..209, 197..259, 307..402, 312..395, 502..594, 508..588, 510..620, 598..657, 598..657, 599..664 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o3.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 2327   | End     | 2711                 |
| GI       | none   | Score   | 139                  |
| Exons    | 2327..2428, 2332..2427, 2350..2433, 2534..2695, 2646..2711 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o6.tm   | Method  | TBLASTX:Maize        |
| Start    | 2327   | End     | 2714                 |
| GI       | none   | Score   | 166                  |
| Exons    | 2327..2428, 2332..2427, 2333..2428, 2344..2448, 2540..2701, 2540..2710, 2646..2714 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o3.np                     | Method  | AAT/NAP              |
| Start    | 4231   | End     | 6830                 |
| GI       | 4481948  | Score   | 292                  |
| Exons    | 4231..4683, 5431..5584, 5662..5979, 6307..6830 |         |                      |



GI Descrip. (AL035637) hypothetical protein [Schizosaccharomyces pombe]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o1.tm                     | Method  | TBLASTX:Maize        |
| Start    | 4331   | End     | 4690                 |
| GI       | none   | Score   | 443                  |
| Exons    | 4331..4678, 4333..4689, 4456..4689, 4535..4690 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o2.gs   | Method  | GENSCAN              |
| Start    | 5632   | End     | 14235                |
| GI       | none   | Score   | .77                  |
| Exons    | 5632..5979, 6307..6518, 6674..6797, 6853..6931, 8433..8707, 8848..8934, 9780..9971, 10480..10633, 10923..10999, 11430..11475, 11963..12049, 12449..12595, 13838..14235 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 5854   | End     | 6838                 |
| GI       | none   | Score   | 88                   |
| Exons    | 5854..5985, 5858..5980, 6271..6516, 6314..6439, 6653..6730, 6746..6838 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21889                              | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579                              | Strand  | -                    |
| Start    | 4231                               | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o3.ts         | Method  | TBLASTX:Soybean      |
| Start    | 6307                               | End     | 6519                 |
| GI       | none                               | Score   | 113                  |
| Exons    | 6307..6516, 6308..6439, 6400..6519 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o5.tm   | Method  | TBLASTX:Maize        |
| Start    | 6338   | End     | 6697                 |
| GI       | none   | Score   | 140                  |
| Exons    | 6338..6451, 6340..6516, 6341..6547, 6400..6519, 6477..6548, 6623..6697, 6626..6670, 6654..6695 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 8402   | End     | 9899                 |
| GI       | none   | Score   | 384                  |
| Exons    | 8402..8713, 8412..8708, 8450..8731, 8843..8935, 8847..8936, 8847..8933, 8848..8934, 9383..9445, 9388..9450, 9762..9899, 9768..9896 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21889 | Seq. ID | OJ990205_04.9819.C62 |
|----------|-------|---------|----------------------|

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 45579  | Strand | -       |
| Start       | 4231   | End    | 14484   |
| Name        | OJ990205_04.9819.C62.o4.np                         | Method | AAT/NAP |
| Start       | 8417   | End    | 8756    |
| GI          | 5881778  | Score  | 183     |
| Exons       | 8417..8756   |        |         |
| GI Descrip. | (AL117386) putative protein [Arabidopsis thaliana] |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 8429   | End     | 9858                 |
| GI       | none   | Score   | 188                  |
| Exons    | 8429..8713, 8454..8708, 8471..8710, 9382..9450, 9768..9851, 9774..9851, 9790..9858 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o4.tc                     | Method  | TBLASTX:Cress        |
| Start    | 8465   | End     | 8681                 |
| GI       | none   | Score   | 108                  |
| Exons    | 8465..8560, 8466..8549, 8553..8681, 8573..8680 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No.    | 45579  | Strand  | -                    |
| Start       | 4231   | End     | 14484                |
| Name        | OJ990205_04.9819.C62.o3.gp   | Method  | AAT/GAP              |
| Start       | 8513   | End     | 10568                |
| GI          | 27880_1.R1084  | Score   | 908                  |
| Exons       | 8513..8707, 8848..8934, 9385..9444, 9780..9848, 10480..10568                         |         |                      |
| GI Descrip. | '5881778/emb CAB55696.1  9.0e-13 (AL117386) putative protein [Arabidopsis thaliana]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No.    | 45579  | Strand  | -                    |
| Start       | 4231   | End     | 14484                |
| Name        | OJ990205_04.9819.C62.o5.np   | Method  | AAT/NAP              |
| Start       | 10471  | End     | 14112                |
| GI          | 5881779  | Score   | 540                  |
| Exons       | 10471..10633, 10923..10999, 11430..11475, 12449..12595, 13838..14112 |         |                      |
| GI Descrip. | (AL117386) putative protein [Arabidopsis thaliana]                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 10477  | End     | 12049                |
| GI       | none   | Score   | 202                  |
| Exons    | 10477..10632, 10482..10634, 10482..10640, 10908..11000, 10922..11011, 10922..11002, 11428..11472, 11430..11468, 11430..11474, 11431..11472, 11984..12049, 11989..12048, 11990..12049 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21889 | Seq. ID | OJ990205_04.9819.C62 |
|----------|-------|---------|----------------------|

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 45579  | Strand | -       |
| Start       | 4231   | End    | 14484   |
| Name        | OJ990205_04.9819.C62.o4.gp   | Method | AAT/GAP |
| Start       | 11944  | End    | 14484   |
| GI          | 20855_1.R1084  | Score  | 1352    |
| Exons       | 11944..12049, 12449..12595, 13838..14256, 14376..14484                               |        |         |
| GI Descrip. | '5881779/emb CAB55697.1  2.0e-43 (AL117386) putative protein [Arabidopsis thaliana]' |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 12472  | End     | 14073                |
| GI       | none   | Score   | 62                   |
| Exons    | 12472..12528, 12473..12529, 12532..12594, 12543..12596, 13828..13926, 13832..14071, 13843..14073 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889                                    | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579                                    | Strand  | -                    |
| Start    | 4231                                     | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o2.tc               | Method  | TBLASTX:Cress        |
| Start    | 12541                                    | End     | 14073                |
| GI       | none                                     | Score   | 144                  |
| Exons    | 12541..12603, 13832..14041, 13846..14073 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21889  | Seq. ID | OJ990205_04.9819.C62 |
| Gene No. | 45579  | Strand  | -                    |
| Start    | 4231   | End     | 14484                |
| Name     | OJ990205_04.9819.C62.o4.tm                             | Method  | TBLASTX:Maize        |
| Start    | 12544  | End     | 14163                |
| GI       | none   | Score   | 309                  |
| Exons    | 12544..12594, 13829..14158, 13843..14073, 14131..14163 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21890                      | Seq. ID | OJ990205_04.9819.C63 |
| Gene No. | 45580                      | Strand  | +                    |
| Start    | 312                        | End     | 446                  |
| Name     | OJ990205_04.9819.C63.o1.gs | Method  | GENSCAN              |
| Start    | 312                        | End     | 446                  |
| GI       | none                       | Score   | .49                  |
| Exons    | 312..446                   |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21891   | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45581   | Strand  | +                    |
| Start    | 451   | End     | 4229                 |
| Name     | OJ990205_04.9819.C64.o1.gs  | Method  | GENSCAN              |
| Start    | 451   | End     | 4135                 |
| GI       | none  | Score   | .79                  |
| Exons    | 451..472, 903..1186, 1718..1839, 1933..2255, 3046..3470, 3698..4135 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21891                      | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45581                      | Strand  | +                    |
| Start    | 451                        | End     | 4229                 |
| Name     | OJ990205_04.9819.C64.o2.np | Method  | AAT/NAP              |
| Start    | 1001                       | End     | 4229                 |
| GI       | 2462826                    | Score   | 1049                 |

Exons 1001..1186, 1718..1839, 1933..2377, 2460..2566, 2663..3164,  
3228..3470, 3698..4229

GI Descrip. (AF000657) unknown protein [Arabidopsis thaliana]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21891                      | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45582                      | Strand  | -                    |
| Start    | 1                          | End     | 1297                 |
| Name     | OJ990205_04.9819.C64.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 1297                 |
| GI       | 6580645                    | Score   | 99                   |

Exons 1..38, 374..440, 916..1297

GI Descrip. (AL133469) putative secreted proline-rich protein [Streptomyces coelicolor A3(2)]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21891                      | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45583                      | Strand  |                      |
| Start    | 1714                       | End     | 2335                 |
| Name     | OJ990205_04.9819.C64.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 1714                       | End     | 2271                 |
| GI       | none                       | Score   | 107                  |

Exons 1714..1839, 1727..1840, 1740..1841, 1740..1853, 1931..2269,  
1931..2158, 1940..2017, 2044..2271, 2077..2271

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21891                      | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45583                      | Strand  |                      |
| Start    | 1714                       | End     | 2335                 |
| Name     | OJ990205_04.9819.C64.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 1771                       | End     | 2335                 |
| GI       | none                       | Score   | 79                   |

Exons 1771..1839, 1772..1840, 1925..2260, 1931..2335, 2041..2322

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21891                      | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45584                      | Strand  |                      |
| Start    | 2237                       | End     | 2924                 |
| Name     | OJ990205_04.9819.C64.o2.tc | Method  | TBLASTX:Cress        |
| Start    | 2237                       | End     | 2924                 |
| GI       | none                       | Score   | 109                  |

Exons 2237..2377, 2660..2851, 2661..2852, 2803..2862, 2880..2924

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21891                      | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45585                      | Strand  |                      |
| Start    | 2880                       | End     | 4081                 |
| Name     | OJ990205_04.9819.C64.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 2880                       | End     | 3158                 |
| GI       | none                       | Score   | 53                   |

Exons 2880..2924, 2979..3158, 2993..3067, 2995..3078, 3021..3086

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21891                      | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45585                      | Strand  |                      |
| Start    | 2880                       | End     | 4081                 |
| Name     | OJ990205_04.9819.C64.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 2994                       | End     | 3389                 |
| GI       | none                       | Score   | 145                  |

Exons 2994..3158, 3255..3389, 3263..3388

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21891 | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45585 | Strand  |                      |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 2880   | End    | 4081          |
| Name  | OJ990205_04.9819.C64.o2.tm                                 | Method | TBLASTX:Maize |
| Start | 3179   | End    | 3473          |
| GI    | none   | Score  | 196           |
| Exons | 3179..3406, 3189..3416, 3194..3418, 3418..3471, 3420..3473 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21891  | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45585  | Strand  |                      |
| Start    | 2880   | End     | 4081                 |
| Name     | OJ990205_04.9819.C64.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3261   | End     | 4081                 |
| GI       | none   | Score   | 262                  |
| Exons    | 3261..3476, 3263..3424, 3704..3790, 3707..3838, 3715..3828, 3887..4081 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21891  | Seq. ID | OJ990205_04.9819.C64 |
| Gene No. | 45585  | Strand  |                      |
| Start    | 2880   | End     | 4081                 |
| Name     | OJ990205_04.9819.C64.o3.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 3695   | End     | 4081                 |
| GI       | none   | Score   | 173                  |
| Exons    | 3695..3901, 3695..3778, 3697..3852, 3866..4036, 4022..4081 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21892   | Seq. ID | OJ990205_04.9819.C65 |
| Gene No.    | 45586   | Strand  | +                    |
| Start       | 78  | End     | 2784                 |
| Name        | OJ990205_04.9819.C65.o1.np  | Method  | AAT/NAP              |
| Start       | 78  | End     | 1976                 |
| GI          | 2462826   | Score   | 577                  |
| Exons       | 78..269, 348..575, 675..991, 1181..1370, 1481..1509, 1537..1635, 1684..1976 |         |                      |
| GI Descrip. | (AF000657) unknown protein [Arabidopsis thaliana]                           |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21892   | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45586   | Strand  | +                    |
| Start    | 78  | End     | 2784                 |
| Name     | OJ990205_04.9819.C65.o1.gs  | Method  | GENSCAN              |
| Start    | 99  | End     | 2784                 |
| GI       | none  | Score   | .54                  |
| Exons    | 99..269, 348..575, 675..872, 1067..1111, 1252..1325, 1481..1951, 2396..2687, 2716..2784 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21892                      | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45586                      | Strand  | +                    |
| Start    | 78                         | End     | 2784                 |
| Name     | OJ990205_04.9819.C65.o1.gp | Method  | AAT/GAP              |
| Start    | 1679                       | End     | 1917                 |
| GI       | 4968583                    | Score   | 474                  |
| Exons    | 1679..1917                 |         |                      |

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 21892                                | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587                                | Strand  | -                    |
| Start    | 2113                                 | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o3.tc           | Method  | TBLASTX:Cress        |
| Start    | 78                                   | End     | 521                  |
| GI       | none                                 | Score   | 146                  |
| Exons    | 78..227, 87..263, 345..521, 350..463 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21892  | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587  | Strand  | -                    |
| Start    | 2113   | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o1.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 84   | End     | 901                  |
| GI       | none   | Score   | 152                  |
| Exons    | 84..227, 84..272, 347..550, 647..901, 672..893 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21892  | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587  | Strand  | -                    |
| Start    | 2113   | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 180  | End     | 577                  |
| GI       | none   | Score   | 64                   |
| Exons    | 180..269, 181..261, 348..491, 349..483, 350..490, 351..491, 471..575, 487..576, 494..571, 518..577 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21892  | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587  | Strand  | -                    |
| Start    | 2113   | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 653  | End     | 1751                 |
| GI       | none   | Score   | 254                  |
| Exons    | 653..910, 669..920, 671..910, 1030..1077, 1037..1090, 1038..1061, 1043..1084, 1178..1357, 1179..1370, 1180..1326, 1472..1627, 1478..1630, 1479..1634, 1685..1750, 1686..1751 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21892                      | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587                      | Strand  | -                    |
| Start    | 2113                       | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 1521                       | End     | 1967                 |
| GI       | none                       | Score   | 63                   |
| Exons    | 1521..1631, 1695..1967     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21892  | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587  | Strand  | -                    |
| Start    | 2113   | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o1.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 1667   | End     | 1928                 |
| GI       | none   | Score   | 117                  |
| Exons    | 1667..1828, 1668..1916, 1679..1921, 1689..1928 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21892                      | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587                      | Strand  | -                    |
| Start    | 2113                       | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 1689                       | End     | 1964                 |
| GI       | none                       | Score   | 257                  |
| Exons    | 1689..1964                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21892                      | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587                      | Strand  | -                    |
| Start    | 2113                       | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 1754                       | End     | 1967                 |

|          |  |         |                      |
|----------|--|---------|----------------------|
| GI       | none   | Score   | 276                  |
| Exons    | 1754..1957, 1755..1967, 1782..1967   |         |                      |
|          |  |         |                      |
| Seq. No. | 21892  | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587  | Strand  | -                    |
| Start    | 2113   | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o2.gp   | Method  | AAT/GAP              |
| Start    | 2113   | End     | 3694                 |
| GI       | none   | Score   | 2157                 |
| Exons    | 2113..2747, 3163..3694   |         |                      |
|          |  |         |                      |
| Seq. No. | 21892  | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587  | Strand  | -                    |
| Start    | 2113   | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 2512   | End     | 3576                 |
| GI       | none   | Score   | 69                   |
| Exons    | 2512..2664, 2526..2672, 2589..2750, 2590..2748, 3163..3333, 3164..3298, 3397..3420, 3397..3429, 3423..3449, 3511..3576, 3518..3550 |         |                      |
|          |  |         |                      |
| Seq. No. | 21892  | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587  | Strand  | -                    |
| Start    | 2113   | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 2529   | End     | 3333                 |
| GI       | none   | Score   | 38                   |
| Exons    | 2529..2672, 2530..2571, 2547..2750, 2590..2667, 3163..3237, 3164..3223, 3223..3333, 3233..3298                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 21892  | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587  | Strand  | -                    |
| Start    | 2113   | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 2643   | End     | 3333                 |
| GI       | none   | Score   | 65                   |
| Exons    | 2643..2750, 3163..3237, 3164..3223, 3226..3333, 3227..3298   |         |                      |
|          |  |         |                      |
| Seq. No. | 21892  | Seq. ID | OJ990205_04.9819.C65 |
| Gene No. | 45587  | Strand  | -                    |
| Start    | 2113   | End     | 3694                 |
| Name     | OJ990205_04.9819.C65.o2.gs   | Method  | GENSCAN              |
| Start    | 2896   | End     | 3546                 |
| GI       | none   | Score   | .96                  |
| Exons    | 2896..2919, 3163..3546   |         |                      |
|          |  |         |                      |
| Seq. No. | 21893  | Seq. ID | OJ990205_04.9819.C66 |
| Gene No. | 45588  | Strand  | -                    |
| Start    | 525  | End     | 622                  |
| Name     | OJ990205_04.9819.C66.o1.gs   | Method  | GENSCAN              |
| Start    | 525  | End     | 622                  |
| GI       | none   | Score   | .76                  |
| Exons    | 525..622   |         |                      |
|          |  |         |                      |
| Seq. No. | 21894  | Seq. ID | OJ990205_04.9819.C67 |
| Gene No. | 45589  | Strand  | -                    |
| Start    | 156  | End     | 773                  |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990205_04.9819.C67.ol.gs   | Method  | GENSCAN              |
| Start       | 156  | End     | 773                  |
| GI          | none   | Score   | .84                  |
| Exons       | 156..332, 415..773   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21894  | Seq. ID | OJ990205_04.9819.C67 |
| Gene No.    | 45589  | Strand  | -                    |
| Start       | 156  | End     | 773                  |
| Name        | OJ990205_04.9819.C67.ol.ts   | Method  | TBLASTX:Soybean      |
| Start       | 410  | End     | 634                  |
| GI          | none   | Score   | 115                  |
| Exons       | 410..622, 418..633, 434..634                                       |         |                      |
|             |  |         |                      |
| Seq. No.    | 21894  | Seq. ID | OJ990205_04.9819.C67 |
| Gene No.    | 45589  | Strand  | -                    |
| Start       | 156  | End     | 773                  |
| Name        | OJ990205_04.9819.C67.ol.tm   | Method  | TBLASTX:Maize        |
| Start       | 434  | End     | 661                  |
| GI          | none   | Score   | 230                  |
| Exons       | 434..661, 436..660   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21895  | Seq. ID | OJ990205_04.9819.C68 |
| Gene No.    | 45590  | Strand  | -                    |
| Start       | 298  | End     | 487                  |
| Name        | OJ990205_04.9819.C68.ol.gs   | Method  | GENSCAN              |
| Start       | 298  | End     | 487                  |
| GI          | none   | Score   | .76                  |
| Exons       | 298..487   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21896  | Seq. ID | OJ990205_04.9819.C69 |
| Gene No.    | 45591  | Strand  | +                    |
| Start       | 1  | End     | 869                  |
| Name        | OJ990205_04.9819.C69.ol.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 869                  |
| GI          | 2829923  | Score   | 208                  |
| Exons       | 1..42, 151..218, 652..869  |         |                      |
| GI Descrip. | (AC002291) Similar to uridylyl transferases [Arabidopsis thaliana] |         |                      |
|             |  |         |                      |
| Seq. No.    | 21896  | Seq. ID | OJ990205_04.9819.C69 |
| Gene No.    | 45591  | Strand  | +                    |
| Start       | 1  | End     | 869                  |
| Name        | OJ990205_04.9819.C69.ol.gs   | Method  | GENSCAN              |
| Start       | 36   | End     | 834                  |
| GI          | none   | Score   | .89                  |
| Exons       | 36..42, 151..218, 652..834   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21897  | Seq. ID | OJ990205_04.9819.C70 |
| Gene No.    | 45592  | Strand  | -                    |
| Start       | 1  | End     | 961                  |
| Name        | OJ990205_04.9819.C70.ol.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 961                  |
| GI          | 2829923  | Score   | 245                  |
| Exons       | 1..33, 342..443, 649..816, 846..961                                |         |                      |
| GI Descrip. | (AC002291) Similar to uridylyl transferases [Arabidopsis thaliana] |         |                      |



Seq. No. 21897  
 Gene No. 45592  
 Start 1  
 Name OJ990205\_04.9819.C70.o1.gs  
 Start 336  
 GI none  
 Exons 336..443, 649..912

Seq. ID OJ990205\_04.9819.C70  
 Strand -  
 End 961  
 Method GENSCAN  
 End 912  
 Score .74

Seq. No. 21897  
 Gene No. 45592  
 Start 1  
 Name OJ990205\_04.9819.C70.o1.tc  
 Start 342  
 GI none  
 Exons 342..398, 649..813, 665..814

Seq. ID OJ990205\_04.9819.C70  
 Strand -  
 End 961  
 Method TBLASTX:Cress  
 End 814  
 Score 134

Seq. No. 21897  
 Gene No. 45592  
 Start 1  
 Name OJ990205\_04.9819.C70.o1.tw  
 Start 342  
 GI none  
 Exons 342..389, 343..402, 644..817, 670..840

Seq. ID OJ990205\_04.9819.C70  
 Strand -  
 End 961  
 Method TBLASTX:Wheat  
 End 840  
 Score 48

Seq. No. 21897  
 Gene No. 45592  
 Start 1  
 Name OJ990205\_04.9819.C70.o1.ts  
 Start 679  
 GI none  
 Exons 679..825, 683..826, 880..939

Seq. ID OJ990205\_04.9819.C70  
 Strand -  
 End 961  
 Method TBLASTX:Soybean  
 End 939  
 Score 140

Seq. No. 21898  
 Gene No. 45593  
 Start 544  
 Name OJ990205\_04.9819.C74.o1.gs  
 Start 544  
 GI none  
 Exons 544..594

Seq. ID OJ990205\_04.9819.C74  
 Strand +  
 End 594  
 Method GENSCAN  
 End 594  
 Score .96

Seq. No. 21899  
 Gene No. 45594  
 Start 397  
 Name OJ990205\_04.9819.C75.o1.tm  
 Start 394  
 GI none  
 Exons 394..549, 398..550, 399..551, 399..557

Seq. ID OJ990205\_04.9819.C75  
 Strand -  
 End 557  
 Method TBLASTX:Maize  
 End 557  
 Score 202

Seq. No. 21899  
 Gene No. 45594  
 Start 397  
 Name OJ990205\_04.9819.C75.o1.gp  
 Start 397  
 GI 27880\_1.R1084  
 Exons 397..485

Seq. ID OJ990205\_04.9819.C75  
 Strand -  
 End 557  
 Method AAT/GAP  
 End 485  
 Score 161

GI Descrip. '5881778/emb|CAB55696.1| 9.0e-13 (AL117386) putative protein [Arabidopsis thaliana]'

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21899  | Seq. ID | OJ990205_04.9819.C75 |
| Gene No. | 45594  | Strand  | -                    |
| Start    | 397  | End     | 557                  |
| Name     | OJ990205_04.9819.C75.o1.gs   | Method  | GENSCAN              |
| Start    | 397  | End     | 550                  |
| GI       | none   | Score   | .74                  |
| Exons    | 397..550   |         |                      |
|          |  |         |                      |
| Seq. No. | 21900  | Seq. ID | OJ990205_04.9819.C76 |
| Gene No. | 45595  | Strand  | -                    |
| Start    | 96   | End     | 543                  |
| Name     | OJ990205_04.9819.C76.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 75   | End     | 509                  |
| GI       | none   | Score   | 112                  |
| Exons    | 75..284, 75..191, 144..284, 145..285, 154..258, 324..509                       |         |                      |
|          |  |         |                      |
| Seq. No. | 21900  | Seq. ID | OJ990205_04.9819.C76 |
| Gene No. | 45595  | Strand  | -                    |
| Start    | 96   | End     | 543                  |
| Name     | OJ990205_04.9819.C76.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 75   | End     | 543                  |
| GI       | none   | Score   | 63                   |
| Exons    | 75..251, 145..252, 168..284, 168..284, 285..542, 307..543                      |         |                      |
|          |  |         |                      |
| Seq. No. | 21900  | Seq. ID | OJ990205_04.9819.C76 |
| Gene No. | 45595  | Strand  | -                    |
| Start    | 96   | End     | 543                  |
| Name     | OJ990205_04.9819.C76.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 75   | End     | 528                  |
| GI       | none   | Score   | 83                   |
| Exons    | 75..245, 87..242, 88..243, 165..275, 288..527, 400..528                        |         |                      |
|          |  |         |                      |
| Seq. No. | 21900  | Seq. ID | OJ990205_04.9819.C76 |
| Gene No. | 45595  | Strand  | -                    |
| Start    | 96   | End     | 543                  |
| Name     | OJ990205_04.9819.C76.o1.gs   | Method  | GENSCAN              |
| Start    | 96   | End     | 518                  |
| GI       | none   | Score   | .44                  |
| Exons    | 96..337, 416..518  |         |                      |
|          |  |         |                      |
| Seq. No. | 21900  | Seq. ID | OJ990205_04.9819.C76 |
| Gene No. | 45595  | Strand  | -                    |
| Start    | 96   | End     | 543                  |
| Name     | OJ990205_04.9819.C76.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 108  | End     | 536                  |
| GI       | none   | Score   | 64                   |
| Exons    | 108..215, 126..401, 135..284, 145..369, 420..530, 438..536                     |         |                      |
|          |  |         |                      |
| Seq. No. | 21901  | Seq. ID | OJ990205_04.9819.C77 |
| Gene No. | 45596  | Strand  | +                    |
| Start    | 296  | End     | 4704                 |
| Name     | OJ990205_04.9819.C77.o1.gs   | Method  | GENSCAN              |
| Start    | 296  | End     | 3653                 |
| GI       | none   | Score   | .58                  |
| Exons    | 296..436, 560..632, 1019..1123, 1921..1984, 2846..3012, 3103..3407, 3525..3653 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21901  | Seq. ID | OJ990205_04.9819.C77 |
| Gene No. | 45596  | Strand  | +                    |
| Start    | 296  | End     | 4704                 |
| Name     | OJ990205_04.9819.C77.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 2826   | End     | 3320                 |
| GI       | none   | Score   | 143                  |
| Exons    | 2826..3020, 2870..2980, 3105..3143, 3123..3140, 3156..3320, 3173..3319 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21901   | Seq. ID | OJ990205_04.9819.C77 |
| Gene No.    | 45596   | Strand  | +                    |
| Start       | 296   | End     | 4704                 |
| Name        | OJ990205_04.9819.C77.o1.np                                | Method  | AAT/NAP              |
| Start       | 2847  | End     | 4704                 |
| GI          | 2780192   | Score   | 219                  |
| Exons       | 2847..3012, 3103..3321, 3490..3599, 4601..4704            |         |                      |
| GI Descrip. | (AJ222713) unnamed protein product [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21901  | Seq. ID | OJ990205_04.9819.C77 |
| Gene No. | 45596  | Strand  | +                    |
| Start    | 296  | End     | 4704                 |
| Name     | OJ990205_04.9819.C77.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 2861   | End     | 3326                 |
| GI       | none   | Score   | 119                  |
| Exons    | 2861..2980, 2862..3020, 2874..3008, 3123..3167, 3125..3139, 3156..3326, 3167..3325 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21901  | Seq. ID | OJ990205_04.9819.C77 |
| Gene No. | 45596  | Strand  | +                    |
| Start    | 296  | End     | 4704                 |
| Name     | OJ990205_04.9819.C77.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 2868   | End     | 3668                 |
| GI       | none   | Score   | 212                  |
| Exons    | 2868..3020, 2870..3016, 3095..3208, 3102..3227, 3213..3326, 3224..3328, 3525..3560, 3591..3668 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21902                      | Seq. ID | OJ990205_04.9819.C78 |
| Gene No. | 45597                      | Strand  | +                    |
| Start    | 13554                      | End     | 14287                |
| Name     | OJ990205_04.9819.C78.o2.gs | Method  | GENSCAN              |
| Start    | 13554                      | End     | 14287                |
| GI       | none                       | Score   | .76                  |
| Exons    | 13554..14027, 14201..14287 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21902                      | Seq. ID | OJ990205_04.9819.C78 |
| Gene No. | 45598                      | Strand  | +                    |
| Start    | 14890                      | End     | 17121                |
| Name     | OJ990205_04.9819.C78.o2.gp | Method  | AAT/GAP              |
| Start    | 14863                      | End     | 15386                |
| GI       | none                       | Score   | 910                  |
| Exons    | 14863..15386               |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21902                      | Seq. ID | OJ990205_04.9819.C78 |
| Gene No. | 45598                      | Strand  | +                    |
| Start    | 14890                      | End     | 17121                |
| Name     | OJ990205_04.9819.C78.o3.gs | Method  | GENSCAN              |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 14890  | End   | 16647 |
| GI    | none   | Score | .67   |
| Exons | 14890..15017, 15144..15267, 15696..15766, 15952..16065, 16131..16233, 16307..16352, 16580..16647 |       |       |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21902  | Seq. ID | OJ990205_04.9819.C78 |
| Gene No.    | 45598  | Strand  | +                    |
| Start       | 14890  | End     | 17121                |
| Name        | OJ990205_04.9819.C78.o1.np   | Method  | AAT/NAP              |
| Start       | 15995  | End     | 17121                |
| GI          | 2829923  | Score   | 281                  |
| Exons       | 15995..16065, 16188..16233, 16357..16471, 16580..16651, 17022..17121 |         |                      |
| GI Descrip. | (AC002291) Similar to uridylyl transferases [Arabidopsis thaliana]   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21902  | Seq. ID | OJ990205_04.9819.C78 |
| Gene No. | 45599  | Strand  | -                    |
| Start    | 2567   | End     | 12656                |
| Name     | OJ990205_04.9819.C78.o1.gs   | Method  | GENSCAN              |
| Start    | 2567   | End     | 12656                |
| GI       | none   | Score   | .49                  |
| Exons    | 2567..2777, 6623..6708, 7384..7470, 8095..8157, 10619..10684, 11193..11396, 11902..12014, 12410..12581, 12639..12656 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21902  | Seq. ID | OJ990205_04.9819.C78 |
| Gene No. | 45600  | Strand  | -                    |
| Start    | 16013  | End     | 16650                |
| Name     | OJ990205_04.9819.C78.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 16013  | End     | 16650                |
| GI       | none   | Score   | 89                   |
| Exons    | 16013..16063, 16189..16236, 16356..16469, 16357..16470, 16575..16649, 16579..16650 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21902  | Seq. ID | OJ990205_04.9819.C78 |
| Gene No. | 45600  | Strand  | -                    |
| Start    | 16013  | End     | 16650                |
| Name     | OJ990205_04.9819.C78.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 16034  | End     | 16644                |
| GI       | none   | Score   | 52                   |
| Exons    | 16034..16066, 16186..16236, 16338..16469, 16357..16470, 16575..16643, 16579..16644 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21903  | Seq. ID | OJ990205_04.9819.C79 |
| Gene No.    | 45601  | Strand  | +                    |
| Start       | 1  | End     | 601                  |
| Name        | OJ990205_04.9819.C79.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 601                  |
| GI          | 2829923  | Score   | 264                  |
| Exons       | 1..131, 233..462, 496..601   |         |                      |
| GI Descrip. | (AC002291) Similar to uridylyl transferases [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21903                      | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45602                      | Strand  | -                    |
| Start    | 161                        | End     | 872                  |
| Name     | OJ990205_04.9819.C79.o1.gs | Method  | GENSCAN              |

|       |                    |       |     |
|-------|--------------------|-------|-----|
| Start | 161                | End   | 665 |
| GI    | none               | Score | .55 |
| Exons | 161..592, 615..665 |       |     |

  

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21903   | Seq. ID | OJ990205_04.9819.C79 |
| Gene No.    | 45602   | Strand  | -                    |
| Start       | 161   | End     | 872                  |
| Name        | OJ990205_04.9819.C79.o1.gp  | Method  | AAT/GAP              |
| Start       | 365   | End     | 872                  |
| GI          | 36648_1.R1084   | Score   | 740                  |
| Exons       | 365..872  |         |                      |
| GI Descrip. | '58067/emb X52325 ARBLSKP 2.0e-13 pBluescript SK(+) vector DNA, phagemid excised from lambda ZAP' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21903                      | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603                      | Strand  | -                    |
| Start    | 1569                       | End     | 3876                 |
| Name     | OJ990205_04.9819.C79.o2.tc | Method  | TBLASTX:Cress        |
| Start    | 226                        | End     | 462                  |
| GI       | none                       | Score   | 291                  |
| Exons    | 226..462, 230..460         |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21903                        | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603                        | Strand  | -                    |
| Start    | 1569                         | End     | 3876                 |
| Name     | OJ990205_04.9819.C79.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 230                          | End     | 414                  |
| GI       | none                         | Score   | 217                  |
| Exons    | 230..412, 232..414, 257..397 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21903                        | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603                        | Strand  | -                    |
| Start    | 1569                         | End     | 3876                 |
| Name     | OJ990205_04.9819.C79.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 230                          | End     | 405                  |
| GI       | none                         | Score   | 263                  |
| Exons    | 230..403, 230..403, 232..405 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21903  | Seq. ID | OJ990205_04.9819.C79 |
| Gene No.    | 45603  | Strand  | -                    |
| Start       | 1569   | End     | 3876                 |
| Name        | OJ990205_04.9819.C79.o2.np   | Method  | AAT/NAP              |
| Start       | 1434   | End     | 3561                 |
| GI          | 2829925  | Score   | .966                 |
| Exons       | 1434..1511, 1605..1730, 2083..2261, 2343..2501, 2592..2721, 2864..3017, 3129..3214, 3331..3384, 3475..3561 |         |                      |
| GI Descrip. | (AC002291) Similar to dnaj-like protein, gp Y11969 2230757 [Arabidopsis thaliana]                          |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21903  | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603  | Strand  | -                    |
| Start    | 1569   | End     | 3876                 |
| Name     | OJ990205_04.9819.C79.o2.gs   | Method  | GENSCAN              |
| Start    | 1569   | End     | 3876                 |
| GI       | none   | Score   | .78                  |
| Exons    | 1569..1730, 1836..1916, 2083..2282, 2343..2501, 2592..2721, 2864..3017, 3129..3240, 3475..3653, 3761..3876 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21903  | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603  | Strand  | -                    |
| Start    | 1569   | End     | 3876                 |
| Name     | OJ990205_04.9819.C79.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1836   | End     | 3556                 |
| GI       | none   | Score   | 68                   |
| Exons    | 1836..1916, 1837..1917, 2080..2262, 2081..2263, 2339..2497, 2341..2505, 2596..2718, 2910..3023, 2939..3016, 3129..3245, 3131..3214, 3319..3390, 3323..3385, 3470..3556, 3475..3555 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21903  | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603  | Strand  | -                    |
| Start    | 1569   | End     | 3876                 |
| Name     | OJ990205_04.9819.C79.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 2059   | End     | 3020                 |
| GI       | none   | Score   | 77                   |
| Exons    | 2059..2181, 2075..2314, 2080..2262, 2339..2503, 2341..2505, 2599..2724, 2636..2725, 2864..3019, 2876..3010, 2907..3020 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21903  | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603  | Strand  | -                    |
| Start    | 1569   | End     | 3876                 |
| Name     | OJ990205_04.9819.C79.o2.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 2080   | End     | 2503                 |
| GI       | none   | Score   | 60                   |
| Exons    | 2080..2211, 2081..2239, 2339..2503, 2341..2502, 2375..2503 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21903  | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603  | Strand  | -                    |
| Start    | 1569   | End     | 3876                 |
| Name     | OJ990205_04.9819.C79.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 2159   | End     | 2724                 |
| GI       | none   | Score   | 148                  |
| Exons    | 2159..2263, 2160..2258, 2339..2500, 2341..2517, 2593..2724, 2636..2719 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21903  | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603  | Strand  | -                    |
| Start    | 1569   | End     | 3876                 |
| Name     | OJ990205_04.9819.C79.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 2966   | End     | 3556                 |
| GI       | none   | Score   | 88                   |
| Exons    | 2966..3019, 2967..3020, 3128..3214, 3142..3231, 3319..3390, 3326..3385, 3475..3555, 3476..3556 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21903  | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603  | Strand  | -                    |
| Start    | 1569   | End     | 3876                 |
| Name     | OJ990205_04.9819.C79.o3.tc   | Method  | TBLASTX:Cress        |
| Start    | 3131   | End     | 3607                 |
| GI       | none   | Score   | 57                   |
| Exons    | 3131..3214, 3134..3217, 3319..3390, 3323..3376, 3470..3607, 3475..3555 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21903 | Seq. ID | OJ990205_04.9819.C79 |
| Gene No. | 45603 | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 1569   | End    | 3876          |
| Name  | OJ990205_04.9819.C79.o1.tw   | Method | TBLASTX:Wheat |
| Start | 3140   | End    | 3555          |
| GI    | none   | Score  | 51            |
| Exons | 3140..3214, 3147..3206, 3320..3385, 3323..3385, 3325..3390, 3467..3499, 3475..3555, 3476..3553 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21904  | Seq. ID | OJ990205_04.9819.C80 |
| Gene No. | 45604  | Strand  | -                    |
| Start    | 2275   | End     | 4626                 |
| Name     | OJ990205_04.9819.C80.o2.gs                     | Method  | GENSCAN              |
| Start    | 2275   | End     | 4508                 |
| GI       | none   | Score   | .85                  |
| Exons    | 2275..2787, 3123..3362, 3714..3773, 4433..4508 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21904  | Seq. ID | OJ990205_04.9819.C80 |
| Gene No. | 45604  | Strand  | -                    |
| Start    | 2275   | End     | 4626                 |
| Name     | OJ990205_04.9819.C80.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 2328   | End     | 3614                 |
| GI       | none   | Score   | 150                  |
| Exons    | 2328..2426, 2457..2618, 2461..2586, 2462..2587, 2677..2733, 2684..2734, 3175..3363, 3186..3362, 3503..3598, 3504..3614 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21904  | Seq. ID | OJ990205_04.9819.C80 |
| Gene No.    | 45604  | Strand  | -                    |
| Start       | 2275   | End     | 4626                 |
| Name        | OJ990205_04.9819.C80.o1.np                                 | Method  | AAT/NAP              |
| Start       | 2332   | End     | 4626                 |
| GI          | 3688193  | Score   | 437                  |
| Exons       | 2332..2698, 3166..3362, 3506..3613, 3714..3773, 4433..4626 |         |                      |
| GI Descrip. | (AJ010091) MAP3K alpha 1 protein kinase [Brassica napus]   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21904  | Seq. ID | OJ990205_04.9819.C80 |
| Gene No. | 45604  | Strand  | -                    |
| Start    | 2275   | End     | 4626                 |
| Name     | OJ990205_04.9819.C80.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 2472   | End     | 4517                 |
| GI       | none   | Score   | 130                  |
| Exons    | 2472..2558, 3165..3362, 3169..3363, 3503..3595, 3504..3614, 3508..3615, 3508..3615, 3711..3785, 3712..3786, 4424..4516, 4434..4517 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21904  | Seq. ID | OJ990205_04.9819.C80 |
| Gene No.    | 45604  | Strand  | -                    |
| Start       | 2275   | End     | 4626                 |
| Name        | OJ990205_04.9819.C80.o1.gp   | Method  | AAT/GAP              |
| Start       | 3303   | End     | 4511                 |
| GI          | LIB3474-005-P1-K1-G2   | Score   | 554                  |
| Exons       | 3303..3362, 3506..3613, 3714..3773, 4433..4511   |         |                      |
| GI Descrip. | '3688193/emb CAA08995.1  5.0e-42 (AJ010091) MAP3K alpha 1 protein kinase [Brassica napus]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21905                      | Seq. ID | OJ990205_04.9819.C81 |
| Gene No. | 45605                      | Strand  | -                    |
| Start    | 1                          | End     | 2688                 |
| Name     | OJ990205_04.9819.C81.o1.np | Method  | AAT/NAP              |

|             |  |       |      |
|-------------|--|-------|------|
| Start       | 1  | End   | 2688 |
| GI          | 3688191  | Score | 164  |
| Exons       | 1..63, 382..444, 585..672, 1175..1368, 2659..2688            |       |      |
| GI Descrip. | (AJ010090) MAP3K alpha protein kinase [Arabidopsis thaliana] |       |      |

|          |                                |         |                      |
|----------|--------------------------------|---------|----------------------|
| Seq. No. | 21905                          | Seq. ID | OJ990205_04.9819.C81 |
| Gene No. | 45605                          | Strand  | -                    |
| Start    | 1                              | End     | 2688                 |
| Name     | OJ990205_04.9819.C81.ol.gs     | Method  | GENSCAN              |
| Start    | 382                            | End     | 1675                 |
| GI       | none                           | Score   | .41                  |
| Exons    | 382..444, 642..672, 1175..1675 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21906   | Seq. ID | OJ990205_04.9819.C82 |
| Gene No.    | 45606   | Strand  | -                    |
| Start       | 3742  | End     | 6344                 |
| Name        | OJ990205_04.9819.C82.ol.np                        | Method  | AAT/NAP              |
| Start       | 3742  | End     | 6344                 |
| GI          | 3540195   | Score   | 171                  |
| Exons       | 3742..3858, 6069..6344                            |         |                      |
| GI Descrip. | (AC004260) Unknown protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21906                      | Seq. ID | OJ990205_04.9819.C82 |
| Gene No. | 45606                      | Strand  | -                    |
| Start    | 3742                       | End     | 6344                 |
| Name     | OJ990205_04.9819.C82.ol.tm | Method  | TBLASTX:Maize        |
| Start    | 6072                       | End     | 6258                 |
| GI       | none                       | Score   | 89                   |
| Exons    | 6072..6257, 6109..6258     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21906                      | Seq. ID | OJ990205_04.9819.C82 |
| Gene No. | 45606                      | Strand  | -                    |
| Start    | 3742                       | End     | 6344                 |
| Name     | OJ990205_04.9819.C82.ol.ts | Method  | TBLASTX:Soybean      |
| Start    | 6072                       | End     | 6257                 |
| GI       | none                       | Score   | 143                  |
| Exons    | 6072..6128, 6138..6257     |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21907                                       | Seq. ID | OJ990205_04.9819.C83 |
| Gene No. | 45607                                       | Strand  | -                    |
| Start    | 143   | End     | 5837                 |
| Name     | OJ990205_04.9819.C83.ol.gs                  | Method  | GENSCAN              |
| Start    | 143   | End     | 5837                 |
| GI       | none  | Score   | .69                  |
| Exons    | 143..350, 914..1117, 4728..4860, 5728..5837 |         |                      |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 21908                            | Seq. ID | OJ990205_04.9819.C84 |
| Gene No. | 45608                            | Strand  | -                    |
| Start    | 365                              | End     | 2121                 |
| Name     | OJ990205_04.9819.C84.ol.gs       | Method  | GENSCAN              |
| Start    | 365                              | End     | 2121                 |
| GI       | none                             | Score   | .43                  |
| Exons    | 365..572, 1553..1703, 1770..2121 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21909 | Seq. ID | OJ990205_04.9819.C85 |
| Gene No. | 45609 | Strand  | +                    |
| Start    | 1078  | End     | 7340                 |



|       |  |        |         |
|-------|--|--------|---------|
| Name  | OJ990205_04.9819.C85.o1.gs   | Method | GENSCAN |
| Start | 1078   | End    | 7340    |
| GI    | none   | Score  | .59     |
| Exons | 1078..1193, 2609..2778, 3050..3164, 3437..3566, 4643..4739, 5581..5636, 6575..6668, 7261..7340 |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21909  | Seq. ID | OJ990205_04.9819.C85 |
| Gene No. | 45609  | Strand  | +                    |
| Start    | 1078   | End     | 7340                 |
| Name     | OJ990205_04.9819.C85.o1.gp                     | Method  | AAT/GAP              |
| Start    | 2983   | End     | 5507                 |
| GI       | none   | Score   | 870                  |
| Exons    | 2983..3164, 3437..3566, 4643..4731, 5452..5507 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21909  | Seq. ID | OJ990205_04.9819.C85 |
| Gene No. | 45610  | Strand  | +                    |
| Start    | 7271   | End     | 7508                 |
| Name     | OJ990205_04.9819.C85.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4676   | End     | 7502                 |
| GI       | none   | Score   | 77                   |
| Exons    | 4676..4732, 4681..4737, 4681..4731, 5432..5518, 5443..5508, 5579..5635, 5579..5638, 5580..5639, 5580..5639, 6574..6672, 6575..6730, 7247..7339, 7247..7339, 7248..7340, 7267..7341, 7269..7340, 7270..7350, 7446..7502, 7457..7501 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21909  | Seq. ID | OJ990205_04.9819.C85 |
| Gene No.    | 45610  | Strand  | +                    |
| Start       | 7271   | End     | 7508                 |
| Name        | OJ990205_04.9819.C85.o2.gp                           | Method  | AAT/GAP              |
| Start       | 7271   | End     | 7508                 |
| GI          | 16974_1.R1084  | Score   | 153                  |
| Exons       | 7271..7340, 7458..7508                               |         |                      |
| GI Descrip. | '4097585 9.0e-13 (U64925) NTGP4 [Nicotiana tabacum]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21910                                     | Seq. ID | OJ990205_04.9819.C86 |
| Gene No.    | 45611                                     | Strand  | -                    |
| Start       | 1   | End     | 1658                 |
| Name        | OJ990205_04.9819.C86.o1.np                | Method  | AAT/NAP              |
| Start       | 1   | End     | 1658                 |
| GI          | 4234846                                   | Score   | 741                  |
| Exons       | 1..1658                                   |         |                      |
| GI Descrip. | (AF082130) gag-pol polyprotein [Zea mays] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21910   | Seq. ID | OJ990205_04.9819.C86 |
| Gene No. | 45611   | Strand  | -                    |
| Start    | 1   | End     | 1658                 |
| Name     | OJ990205_04.9819.C86.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 559   | End     | 1570                 |
| GI       | none  | Score   | 76                   |
| Exons    | 559..624, 566..625, 585..626, 603..710, 629..721, 635..715, 821..916, 828..911, 902..964, 936..965, 977..1039, 1027..1197, 1027..1110, 1031..1351, 1037..1354, 1038..1355, 1349..1444, 1356..1466, 1356..1451, 1453..1569, 1454..1570 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21910 | Seq. ID | OJ990205_04.9819.C86 |
| Gene No. | 45611 | Strand  | -                    |
| Start    | 1     | End     | 1658                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990205_04.9819.C86.o1.gs   | Method  | GENSCAN              |
| Start       | 860  | End     | 1602                 |
| GI          | none   | Score   | .92                  |
| Exons       | 860..1137, 1512..1602  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21911  | Seq. ID | OJ990205_04.9819.C89 |
| Gene No.    | 45612  | Strand  | -                    |
| Start       | 1  | End     | 723                  |
| Name        | OJ990205_04.9819.C89.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 723                  |
| GI          | 2829923  | Score   | 190                  |
| Exons       | 1..53, 265..379, 503..547, 671..723                                |         |                      |
| GI Descrip. | (AC002291) Similar to uridylyl transferases [Arabidopsis thaliana] |         |                      |
|             |  |         |                      |
| Seq. No.    | 21911  | Seq. ID | OJ990205_04.9819.C89 |
| Gene No.    | 45612  | Strand  | -                    |
| Start       | 1  | End     | 723                  |
| Name        | OJ990205_04.9819.C89.o1.gs   | Method  | GENSCAN              |
| Start       | 265  | End     | 605                  |
| GI          | none   | Score   | .64                  |
| Exons       | 265..379, 503..605   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21911  | Seq. ID | OJ990205_04.9819.C89 |
| Gene No.    | 45612  | Strand  | -                    |
| Start       | 1  | End     | 723                  |
| Name        | OJ990205_04.9819.C89.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 266  | End     | 721                  |
| GI          | none   | Score   | 125                  |
| Exons       | 266..379, 267..380, 500..547, 662..721                             |         |                      |
|             |  |         |                      |
| Seq. No.    | 21911  | Seq. ID | OJ990205_04.9819.C89 |
| Gene No.    | 45612  | Strand  | -                    |
| Start       | 1  | End     | 723                  |
| Name        | OJ990205_04.9819.C89.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 266  | End     | 700                  |
| GI          | none   | Score   | 103                  |
| Exons       | 266..379, 267..398, 500..550, 662..700                             |         |                      |
|             |  |         |                      |
| Seq. No.    | 21912  | Seq. ID | OJ990305_08.9819.C3  |
| Gene No.    | 45613  | Strand  | +                    |
| Start       | 55   | End     | 405                  |
| Name        | OJ990305_08.9819.C3.o1.gs  | Method  | GENSCAN              |
| Start       | 55   | End     | 405                  |
| GI          | none   | Score   | .64                  |
| Exons       | 55..69, 268..405   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21913  | Seq. ID | OJ990305_08.9819.C4  |
| Gene No.    | 45614  | Strand  | +                    |
| Start       | 276  | End     | 2810                 |
| Name        | OJ990305_08.9819.C4.o2.tw  | Method  | TBLASTX:Wheat        |
| Start       | 270  | End     | 657                  |
| GI          | none   | Score   | 351                  |
| Exons       | 270..656, 281..643, 453..653, 502..654, 505..657                   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21913  | Seq. ID | OJ990305_08.9819.C4  |
| Gene No.    | 45614  | Strand  | +                    |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 276  | End    | 2810    |
| Name        | OJ990305_08.9819.C4.o1.np  | Method | AAT/NAP |
| Start       | 276  | End    | 2810    |
| GI          | 6539553  | Score  | 4418    |
| Exons       | 276..2810  |        |         |
| GI Descrip. | (AP000836) Similar to Oryza australiensis retrotransposon RIRE1 (D85597) [Oryza sativa] gi 6539590 dbj BAA88206.1  (AP000837) Similar to Oryza australiensis retrotransposon RIRE1 (D85597) [Oryza sativa] |        |         |

|          |                              |         |                     |
|----------|------------------------------|---------|---------------------|
| Seq. No. | 21913                        | Seq. ID | OJ990305_08.9819.C4 |
| Gene No. | 45614                        | Strand  | +                   |
| Start    | 276                          | End     | 2810                |
| Name     | OJ990305_08.9819.C4.o2.tm    | Method  | TBLASTX:Maize       |
| Start    | 405                          | End     | 716                 |
| GI       | none                         | Score   | 357                 |
| Exons    | 405..716, 413..643, 456..713 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21913  | Seq. ID | OJ990305_08.9819.C4 |
| Gene No. | 45614  | Strand  | +                   |
| Start    | 276  | End     | 2810                |
| Name     | OJ990305_08.9819.C4.o1.tm                      | Method  | TBLASTX:Maize       |
| Start    | 1217   | End     | 1539                |
| GI       | none   | Score   | 268                 |
| Exons    | 1217..1471, 1224..1538, 1244..1537, 1372..1539 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21913                     | Seq. ID | OJ990305_08.9819.C4 |
| Gene No. | 45614                     | Strand  | +                   |
| Start    | 276                       | End     | 2810                |
| Name     | OJ990305_08.9819.C4.o2.ts | Method  | TBLASTX:Soybean     |
| Start    | 1566                      | End     | 1952                |
| GI       | none                      | Score   | 88                  |
| Exons    | 1566..1721, 1704..1952    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21913                     | Seq. ID | OJ990305_08.9819.C4 |
| Gene No. | 45614                     | Strand  | +                   |
| Start    | 276                       | End     | 2810                |
| Name     | OJ990305_08.9819.C4.o3.tm | Method  | TBLASTX:Maize       |
| Start    | 1740                      | End     | 2174                |
| GI       | none                      | Score   | 303                 |
| Exons    | 1740..2174, 1949..2149    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21913                     | Seq. ID | OJ990305_08.9819.C4 |
| Gene No. | 45614                     | Strand  | +                   |
| Start    | 276                       | End     | 2810                |
| Name     | OJ990305_08.9819.C4.o3.tw | Method  | TBLASTX:Wheat       |
| Start    | 1818                      | End     | 2009                |
| GI       | none                      | Score   | 275                 |
| Exons    | 1818..2009, 1818..2009    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21913  | Seq. ID | OJ990305_08.9819.C4 |
| Gene No. | 45614  | Strand  | +                   |
| Start    | 276  | End     | 2810                |
| Name     | OJ990305_08.9819.C4.o1.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 1962   | End     | 2360                |
| GI       | none   | Score   | 197                 |
| Exons    | 1962..2186, 1970..2140, 2187..2360, 2195..2233 |         |                     |

Seq. No. 21913  
 Gene No. 45614  
 Start 276  
 Name OJ990305\_08.9819.C4.o1.tc  
 Start 1995  
 GI none  
 Exons 1995..2177, 2190..2384

Seq. ID OJ990305\_08.9819.C4  
 Strand +  
 End 2810  
 Method TBLASTX:Cress  
 End 2384  
 Score 112

Seq. No. 21913  
 Gene No. 45614  
 Start 276  
 Name OJ990305\_08.9819.C4.o1.tw  
 Start 2010  
 GI none  
 Exons 2010..2474, 2018..2497, 2518..2748, 2526..2765, 2548..2745, 2606..2764

Seq. ID OJ990305\_08.9819.C4  
 Strand +  
 End 2810  
 Method TBLASTX:Wheat  
 End 2765  
 Score 634

Seq. No. 21914  
 Gene No. 45615  
 Start 5389  
 Name OJ990305\_08.9819.C7.o2.np  
 Start 5389  
 GI 5852180  
 Exons 5389..5448, 6429..6547, 6597..7073  
 GI Descrip. (AL117265) zhb00010.1 [Oryza sativa]

Seq. ID OJ990305\_08.9819.C7  
 Strand +  
 End 7073  
 Method AAT/NAP  
 End 7073  
 Score 575

Seq. No. 21914  
 Gene No. 45616  
 Start 1  
 Name OJ990305\_08.9819.C7.o1.np  
 Start 1  
 GI 4680203  
 Exons 1..799  
 GI Descrip. (AF114171) TNP2-like protein [Sorghum bicolor]

Seq. ID OJ990305\_08.9819.C7  
 Strand -  
 End 1583  
 Method AAT/NAP  
 End 799  
 Score 406

Seq. No. 21914  
 Gene No. 45616  
 Start 1  
 Name OJ990305\_08.9819.C7.o1.gs  
 Start 143  
 GI none  
 Exons 143..799, 1086..1144, 1217..1330, 1562..1583

Seq. ID OJ990305\_08.9819.C7  
 Strand -  
 End 1583  
 Method GENSCAN  
 End 1583  
 Score .48

Seq. No. 21914  
 Gene No. 45617  
 Start 5297  
 Name OJ990305\_08.9819.C7.o1.ts  
 Start 59  
 GI none  
 Exons 59..322, 60..320

Seq. ID OJ990305\_08.9819.C7  
 Strand -  
 End 5679  
 Method TBLASTX:Soybean  
 End 322  
 Score 112

Seq. No. 21914  
 Gene No. 45617  
 Start 5297  
 Name OJ990305\_08.9819.C7.o1.tw  
 Start 77

Seq. ID OJ990305\_08.9819.C7  
 Strand -  
 End 5679  
 Method TBLASTX:Wheat  
 End 340

|             |  |         |                     |
|-------------|--|---------|---------------------|
| GI          | none   | Score   | 101                 |
| Exons       | 77..340, 77..340   |         |                     |
| Seq. No.    | 21914  | Seq. ID | OJ990305_08.9819.C7 |
| Gene No.    | 45617  | Strand  | -                   |
| Start       | 5297   | End     | 5679                |
| Name        | OJ990305_08.9819.C7.o1.gp  | Method  | AAT/GAP             |
| Start       | 5297   | End     | 5679                |
| GI          | uC-osflcyp033a04b1   | Score   | 700                 |
| Exons       | 5297..5679   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21915                     | Seq. ID | OJ990305_08.9819.C8 |
| Gene No. | 45618                     | Strand  | +                   |
| Start    | 77                        | End     | 319                 |
| Name     | OJ990305_08.9819.C8.o1.gs | Method  | GENSCAN             |
| Start    | 77                        | End     | 319                 |
| GI       | none                      | Score   | .98                 |
| Exons    | 77..319                   |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21915   | Seq. ID | OJ990305_08.9819.C8 |
| Gene No.    | 45619   | Strand  | +                   |
| Start       | 3379  | End     | 4122                |
| Name        | OJ990305_08.9819.C8.o2.np   | Method  | AAT/NAP             |
| Start       | 3379  | End     | 4122                |
| GI          | 5295951   | Score   | 177                 |
| Exons       | 3379..3782, 3986..4122  |         |                     |
| GI Descrip. | (AB026295) Similar to Herpesvirus papio BRRF2 homolog gene, partial cds.(U23857) [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21915  | Seq. ID | OJ990305_08.9819.C8 |
| Gene No.    | 45620  | Strand  | +                   |
| Start       | 10959  | End     | 14349               |
| Name        | OJ990305_08.9819.C8.o3.np  | Method  | AAT/NAP             |
| Start       | 10959  | End     | 14349               |
| GI          | 4680182  | Score   | 1219                |
| Exons       | 10959..11809, 11864..12036, 12106..12515, 12590..13097, 14326..14349 |         |                     |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica]                      |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21915  | Seq. ID | OJ990305_08.9819.C8 |
| Gene No. | 45621  | Strand  | +                   |
| Start    | 15964  | End     | 19134               |
| Name     | OJ990305_08.9819.C8.o7.gs  | Method  | GENSCAN             |
| Start    | 15964  | End     | 19134               |
| GI       | none   | Score   | .54                 |
| Exons    | 15964..16020, 17134..17265, 17590..17775, 17954..18264, 18967..19046, 19103..19134 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 21915                                       | Seq. ID | OJ990305_08.9819.C8 |
| Gene No. | 45622                                       | Strand  | -                   |
| Start    | 33  | End     | 13017               |
| Name     | OJ990305_08.9819.C8.o1.np                   | Method  | AAT/NAP             |
| Start    | 33  | End     | 13017               |
| GI       | 5852180                                     | Score   | 200                 |
| Exons    | 33..137, 567..836, 1887..1973, 12943..13017 |         |                     |

GI Descrip. (AL117265) zhb00010.1 [Oryza sativa]

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21915                     | Seq. ID | OJ990305_08.9819.C8 |
| Gene No. | 45622                     | Strand  | -                   |
| Start    | 33                        | End     | 13017               |
| Name     | OJ990305_08.9819.C8.o2.gs | Method  | GENSCAN             |
| Start    | 527                       | End     | 1155                |
| GI       | none                      | Score   | .99                 |
| Exons    | 527..751, 1024..1155      |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21915                     | Seq. ID | OJ990305_08.9819.C8 |
| Gene No. | 45622                     | Strand  | -                   |
| Start    | 33                        | End     | 13017               |
| Name     | OJ990305_08.9819.C8.o1.gp | Method  | AAT/GAP             |
| Start    | 1048                      | End     | 1119                |
| GI       | uC-osroM202024h08a1       | Score   | 86                  |
| Exons    | 1048..1119                |         |                     |

GI Descrip. '5852170/emb|AL117265.1|OST17804 5.0e-84 Oryza sativa indica (GLA4) genomic DNA, chromosome 4, BAC clone:t17804'

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 21915  | Seq. ID | OJ990305_08.9819.C8 |
| Gene No.    | 45622  | Strand  | -                   |
| Start       | 33   | End     | 13017               |
| Name        | OJ990305_08.9819.C8.o2.gp  | Method  | AAT/GAP             |
| Start       | 1260   | End     | 1786                |
| GI          | uC-osflM202048c12b1  | Score   | 899                 |
| Exons       | 1260..1786   |         |                     |
| GI Descrip. | '5257255/dbj AP000364.1 AP000364 2.0e-16 Oryza sativa genomic DNA, chromosome 8, clone:P0026F07' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21915                     | Seq. ID | OJ990305_08.9819.C8 |
| Gene No. | 45622                     | Strand  | -                   |
| Start    | 33                        | End     | 13017               |
| Name     | OJ990305_08.9819.C8.o3.gs | Method  | GENSCAN             |
| Start    | 3483                      | End     | 3860                |
| GI       | none                      | Score   | .91                 |
| Exons    | 3483..3656, 3729..3860    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21915                     | Seq. ID | OJ990305_08.9819.C8 |
| Gene No. | 45622                     | Strand  | -                   |
| Start    | 33                        | End     | 13017               |
| Name     | OJ990305_08.9819.C8.o4.gs | Method  | GENSCAN             |
| Start    | 4623                      | End     | 4988                |
| GI       | none                      | Score   | .54                 |
| Exons    | 4623..4988                |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 21915                      | Seq. ID | OJ990305_08.9819.C8 |
| Gene No. | 45623                      | Strand  | -                   |
| Start    | 14965                      | End     | 15288               |
| Name     | OJ990305_08.9819.C8.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 11040                      | End     | 11480               |
| GI       | none                       | Score   | 57                  |
| Exons    | 11040..11156, 11208..11480 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 21915 | Seq. ID | OJ990305_08.9819.C8 |
| Gene No. | 45623 | Strand  | -                   |
| Start    | 14965 | End     | 15288               |

Name OJ990305\_08.9819.C8.o6.gs  
 Start 14965  
 GI none  
 Exons 14965..15079, 15191..15288

Method GENSCAN  
 End 15288  
 Score .72

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o1.gs  
 Start 691  
 GI none  
 Exons 691..1977, 2023..3788, 3997..4207, 4286..4858, 4897..5072, 5361..5444, 5495..6248

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method GENSCAN  
 End 6248  
 Score .69

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o1.np  
 Start 694  
 GI 4680179  
 Exons 694..4075, 4109..5193  
 GI Descrip. (AF111709) polyprotein [Oryza sativa subsp. indica]

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method AAT/NAP  
 End 5193  
 Score 5371

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o6.tw  
 Start 739  
 GI none  
 Exons 739..1071, 760..1068, 803..1072

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method TBLASTX:Wheat  
 End 1072  
 Score 128

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o1.tm  
 Start 919  
 GI none  
 Exons 919..1359, 935..1357, 1357..1518, 1364..1510, 1396..1515

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method TBLASTX:Maize  
 End 1518  
 Score 261

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o1.tw  
 Start 1072  
 GI none  
 Exons 1072..1698, 1073..1642

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method TBLASTX:Wheat  
 End 1698  
 Score 290

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o4.tm  
 Start 1567  
 GI none  
 Exons 1567..1857, 1571..1858

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method TBLASTX:Maize  
 End 1858  
 Score 208

Seq. No. 21916  
 Gene No. 45624

Seq. ID OJ990305\_08.9819.C9  
 Strand -

Start 691  
 Name OJ990305\_08.9819.C9.o2.ts  
 Start 1657  
 GI none  
 Exons 1657..1917, 1658..1912

End 6248  
 Method TBLASTX:Soybean  
 End 1917  
 Score 153

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o1.tc  
 Start 1681  
 GI none  
 Exons 1681..1824, 1682..1822, 1825..1998

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method TBLASTX:Cress  
 End 1998  
 Score 85

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o2.tw  
 Start 1705  
 GI none  
 Exons 1705..2241, 1706..2272

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method TBLASTX:Wheat  
 End 2272  
 Score 331

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o2.tm  
 Start 2263  
 GI none  
 Exons 2263..2625, 2272..2625, 2276..2626

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method TBLASTX:Maize  
 End 2626  
 Score 168

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o3.tw  
 Start 2275  
 GI none  
 Exons 2275..2697, 2276..2665

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method TBLASTX:Wheat  
 End 2697  
 Score 365

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o3.ts  
 Start 2446  
 GI none  
 Exons 2446..2691, 2447..2674

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method TBLASTX:Soybean  
 End 2691  
 Score 94

Seq. No. 21916  
 Gene No. 45624  
 Start 691  
 Name OJ990305\_08.9819.C9.o3.tm  
 Start 2662  
 GI none  
 Exons 2662..2976, 2705..2755, 2792..2836, 2983..3162, 3008..3154

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248  
 Method TBLASTX:Maize  
 End 3162  
 Score 50

Seq. No. 21916  
 Gene No. 45624  
 Start 691

Seq. ID OJ990305\_08.9819.C9  
 Strand -  
 End 6248



|          |  |         |                      |
|----------|--|---------|----------------------|
| Name     | OJ990305_08.9819.C9.o5.tw                                  | Method  | TBLASTX:Wheat        |
| Start    | 2698   | End     | 3000                 |
| GI       | none   | Score   | 267                  |
| Exons    | 2698..3000, 2714..2998, 2892..2999                         |         |                      |
|          |  |         |                      |
| Seq. No. | 21916  | Seq. ID | OJ990305_08.9819.C9  |
| Gene No. | 45624  | Strand  | -                    |
| Start    | 691  | End     | 6248                 |
| Name     | OJ990305_08.9819.C9.o1.ts                                  | Method  | TBLASTX:Soybean      |
| Start    | 2713   | End     | 3108                 |
| GI       | none   | Score   | 184                  |
| Exons    | 2713..3072, 2714..3004, 3032..3070, 3076..3108             |         |                      |
|          |  |         |                      |
| Seq. No. | 21916  | Seq. ID | OJ990305_08.9819.C9  |
| Gene No. | 45624  | Strand  | -                    |
| Start    | 691  | End     | 6248                 |
| Name     | OJ990305_08.9819.C9.o4.tw                                  | Method  | TBLASTX:Wheat        |
| Start    | 3049   | End     | 3535                 |
| GI       | none   | Score   | 221                  |
| Exons    | 3049..3426, 3052..3417, 3092..3535, 3481..3531             |         |                      |
|          |  |         |                      |
| Seq. No. | 21916  | Seq. ID | OJ990305_08.9819.C9  |
| Gene No. | 45624  | Strand  | -                    |
| Start    | 691  | End     | 6248                 |
| Name     | OJ990305_08.9819.C9.o5.tm                                  | Method  | TBLASTX:Maize        |
| Start    | 3230   | End     | 3520                 |
| GI       | none   | Score   | 185                  |
| Exons    | 3230..3520, 3232..3519                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 21916  | Seq. ID | OJ990305_08.9819.C9  |
| Gene No. | 45624  | Strand  | -                    |
| Start    | 691  | End     | 6248                 |
| Name     | OJ990305_08.9819.C9.o8.tw                                  | Method  | TBLASTX:Wheat        |
| Start    | 3631   | End     | 4048                 |
| GI       | none   | Score   | 69                   |
| Exons    | 3631..3672, 3700..3837, 3701..3814, 3839..4048, 3840..3992 |         |                      |
|          |  |         |                      |
| Seq. No. | 21916  | Seq. ID | OJ990305_08.9819.C9  |
| Gene No. | 45624  | Strand  | -                    |
| Start    | 691  | End     | 6248                 |
| Name     | OJ990305_08.9819.C9.o7.tw                                  | Method  | TBLASTX:Wheat        |
| Start    | 4367   | End     | 4718                 |
| GI       | none   | Score   | 112                  |
| Exons    | 4367..4717, 4524..4718                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 21916  | Seq. ID | OJ990305_08.9819.C9  |
| Gene No. | 45624  | Strand  | -                    |
| Start    | 691  | End     | 6248                 |
| Name     | OJ990305_08.9819.C9.o6.tm                                  | Method  | TBLASTX:Maize        |
| Start    | 4412   | End     | 4717                 |
| GI       | none   | Score   | 90                   |
| Exons    | 4412..4717, 4587..4703                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 21917  | Seq. ID | OJ990305_08.9819.C11 |
| Gene No. | 45625  | Strand  | +                    |
| Start    | 1  | End     | 790                  |
| Name     | OJ990305_08.9819.C11.o1.np                                 | Method  | AAT/NAP              |

|             |  |       |     |
|-------------|--|-------|-----|
| Start       | 1  | End   | 790 |
| GI          | 4512242                                    | Score | 349 |
| Exons       | 1..260, 584..790                           |       |     |
| GI Descrip. | (AB014750) polyprotein [Nicotiana tabacum] |       |     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21917                      | Seq. ID | OJ990305_08.9819.C11 |
| Gene No. | 45625                      | Strand  | +                    |
| Start    | 1                          | End     | 790                  |
| Name     | OJ990305_08.9819.C11.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 30                         | End     | 269                  |
| GI       | none                       | Score   | 240                  |
| Exons    | 30..269, 89..268           |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21917                      | Seq. ID | OJ990305_08.9819.C11 |
| Gene No. | 45625                      | Strand  | +                    |
| Start    | 1                          | End     | 790                  |
| Name     | OJ990305_08.9819.C11.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 30                         | End     | 260                  |
| GI       | none                       | Score   | 282                  |
| Exons    | 30..260, 32..241           |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21917                      | Seq. ID | OJ990305_08.9819.C11 |
| Gene No. | 45625                      | Strand  | +                    |
| Start    | 1                          | End     | 790                  |
| Name     | OJ990305_08.9819.C11.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 30                         | End     | 221                  |
| GI       | none                       | Score   | 232                  |
| Exons    | 30..221, 41..220           |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21917                      | Seq. ID | OJ990305_08.9819.C11 |
| Gene No. | 45625                      | Strand  | +                    |
| Start    | 1                          | End     | 790                  |
| Name     | OJ990305_08.9819.C11.o1.gs | Method  | GENSCAN              |
| Start    | 49                         | End     | 347                  |
| GI       | none                       | Score   | .95                  |
| Exons    | 49..347                    |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21918                                    | Seq. ID | OJ990305_08.9819.C12 |
| Gene No.    | 45626                                    | Strand  | +                    |
| Start       | 361                                      | End     | 822                  |
| Name        | OJ990305_08.9819.C12.o1.np               | Method  | AAT/NAP              |
| Start       | 361                                      | End     | 822                  |
| GI          | 2586082                                  | Score   | 368                  |
| Exons       | 361..822                                 |         |                      |
| GI Descrip. | (U72725) retrofit [Oryza longistaminata] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21918  | Seq. ID | OJ990305_08.9819.C12 |
| Gene No. | 45626  | Strand  | +                    |
| Start    | 361  | End     | 822                  |
| Name     | OJ990305_08.9819.C12.o1.tm                       | Method  | TBLASTX:Maize        |
| Start    | 365  | End     | 649                  |
| GI       | none   | Score   | 99                   |
| Exons    | 365..421, 416..523, 422..481, 493..648, 509..649 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21918 | Seq. ID | OJ990305_08.9819.C12 |
| Gene No. | 45626 | Strand  | +                    |
| Start    | 361   | End     | 822                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Name        | OJ990305_08.9819.C12.ol.tw  | Method  | TBLASTX:Wheat        |
| Start       | 508   | End     | 694                  |
| GI          | none  | Score   | 211                  |
| Exons       | 508..672, 509..694, 518..676  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21919   | Seq. ID | OJ990305_08.9819.C13 |
| Gene No.    | 45627   | Strand  | +                    |
| Start       | 163   | End     | 427                  |
| Name        | OJ990305_08.9819.C13.ol.gs  | Method  | GENSCAN              |
| Start       | 163   | End     | 427                  |
| GI          | none  | Score   | .89                  |
| Exons       | 163..427  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21920   | Seq. ID | OJ990305_08.9819.C14 |
| Gene No.    | 45628   | Strand  | -                    |
| Start       | 63  | End     | 188                  |
| Name        | OJ990305_08.9819.C14.ol.gp  | Method  | AAT/GAP              |
| Start       | 63  | End     | 188                  |
| GI          | none  | Score   | 229                  |
| Exons       | 63..188   |         |                      |
|             |   |         |                      |
| Seq. No.    | 21920   | Seq. ID | OJ990305_08.9819.C14 |
| Gene No.    | 45629   | Strand  | -                    |
| Start       | 322   | End     | 1009                 |
| Name        | OJ990305_08.9819.C14.ol.np  | Method  | AAT/NAP              |
| Start       | 322   | End     | 1002                 |
| GI          | 3175990   | Score   | 525                  |
| Exons       | 322..444, 539..749, 873..1002   |         |                      |
| GI Descrip. | (AJ005836) GDP dissociation inhibitor [Cicer arietinum]   |         |                      |
|             |   |         |                      |
| Seq. No.    | 21920   | Seq. ID | OJ990305_08.9819.C14 |
| Gene No.    | 45629   | Strand  | -                    |
| Start       | 322   | End     | 1009                 |
| Name        | OJ990305_08.9819.C14.ol.tc  | Method  | TBLASTX:Cress        |
| Start       | 334   | End     | 1000                 |
| GI          | none  | Score   | 73                   |
| Exons       | 334..456, 371..445, 539..787, 540..818, 854..1000, 861..998   |         |                      |
|             |   |         |                      |
| Seq. No.    | 21920   | Seq. ID | OJ990305_08.9819.C14 |
| Gene No.    | 45629   | Strand  | -                    |
| Start       | 322   | End     | 1009                 |
| Name        | OJ990305_08.9819.C14.ol.ts  | Method  | TBLASTX:Soybean      |
| Start       | 334   | End     | 947                  |
| GI          | none  | Score   | 79                   |
| Exons       | 334..456, 353..445, 524..739, 538..744, 539..787, 540..755, 627..788, 854..928, 861..923, 863..901, 890..943, 894..947  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21920   | Seq. ID | OJ990305_08.9819.C14 |
| Gene No.    | 45629   | Strand  | -                    |
| Start       | 322   | End     | 1009                 |
| Name        | OJ990305_08.9819.C14.ol.tm  | Method  | TBLASTX:Maize        |
| Start       | 334   | End     | 1000                 |
| GI          | none  | Score   | 86                   |
| Exons       | 334..456, 353..445, 371..457, 538..747, 539..748, 540..755, 666..788, 853..999, 854..1000, 860..988, 861..998, 874..999 |         |                      |
|             |   |         |                      |
| Seq. No.    | 21920   | Seq. ID | OJ990305_08.9819.C14 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 45629  | Strand  | -                    |
| Start       | 322  | End     | 1009                 |
| Name        | OJ990305_08.9819.C14.o1.gs                                   | Method  | GENSCAN              |
| Start       | 370  | End     | 705                  |
| GI          | none   | Score   | .89                  |
| Exons       | 370..444, 539..705   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21920  | Seq. ID | OJ990305_08.9819.C14 |
| Gene No.    | 45629  | Strand  | -                    |
| Start       | 322  | End     | 1009                 |
| Name        | OJ990305_08.9819.C14.o1.tw                                   | Method  | TBLASTX:Wheat        |
| Start       | 672  | End     | 1009                 |
| GI          | none   | Score   | 104                  |
| Exons       | 672..755, 673..747, 674..787, 854..1009, 860..988, 861..998  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21921  | Seq. ID | OJ990305_08.9819.C15 |
| Gene No.    | 45630  | Strand  | +                    |
| Start       | 1  | End     | 718                  |
| Name        | OJ990305_08.9819.C15.o1.np                                   | Method  | AAT/NAP              |
| Start       | 1  | End     | 718                  |
| GI          | 6721517  | Score   | 627                  |
| Exons       | 1..718   |         |                      |
| GI Descrip. | (AP001072) Similar to polyprotein. (AF061282) [Oryza sativa] |         |                      |
|             |  |         |                      |
| Seq. No.    | 21921  | Seq. ID | OJ990305_08.9819.C15 |
| Gene No.    | 45630  | Strand  | +                    |
| Start       | 1  | End     | 718                  |
| Name        | OJ990305_08.9819.C15.o1.tw                                   | Method  | TBLASTX:Wheat        |
| Start       | 100  | End     | 453                  |
| GI          | none   | Score   | 112                  |
| Exons       | 100..315, 316..453, 334..402, 387..446                       |         |                      |
|             |  |         |                      |
| Seq. No.    | 21921  | Seq. ID | OJ990305_08.9819.C15 |
| Gene No.    | 45630  | Strand  | +                    |
| Start       | 1  | End     | 718                  |
| Name        | OJ990305_08.9819.C15.o1.gs                                   | Method  | GENSCAN              |
| Start       | 178  | End     | 632                  |
| GI          | none   | Score   | .4                   |
| Exons       | 178..632   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21921  | Seq. ID | OJ990305_08.9819.C15 |
| Gene No.    | 45630  | Strand  | +                    |
| Start       | 1  | End     | 718                  |
| Name        | OJ990305_08.9819.C15.o1.tm                                   | Method  | TBLASTX:Maize        |
| Start       | 417  | End     | 654                  |
| GI          | none   | Score   | 212                  |
| Exons       | 417..653, 418..654, 514..654                                 |         |                      |
|             |  |         |                      |
| Seq. No.    | 21921  | Seq. ID | OJ990305_08.9819.C15 |
| Gene No.    | 45630  | Strand  | +                    |
| Start       | 1  | End     | 718                  |
| Name        | OJ990305_08.9819.C15.o2.tw                                   | Method  | TBLASTX:Wheat        |
| Start       | 483  | End     | 654                  |
| GI          | none   | Score   | 188                  |
| Exons       | 483..644, 511..654, 520..654                                 |         |                      |
|             |  |         |                      |
| Seq. No.    | 21922  | Seq. ID | OJ990305_08.9819.C18 |

|          |                            |        |               |
|----------|----------------------------|--------|---------------|
| Gene No. | 45631                      | Strand |               |
| Start    | 216                        | End    | 464           |
| Name     | OJ990305_08.9819.C18.o1.tm | Method | TBLASTX:Maize |
| Start    | 216                        | End    | 464           |
| GI       | none                       | Score  | 196           |
| Exons    | 216..464, 219..464         |        |               |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21923                                    | Seq. ID | OJ990305_08.9819.C19 |
| Gene No.    | 45632                                    | Strand  | +                    |
| Start       | 1  | End     | 745                  |
| Name        | OJ990305_08.9819.C19.o1.np               | Method  | AAT/NAP              |
| Start       | 1  | End     | 745                  |
| GI          | 2586082                                  | Score   | 654                  |
| Exons       | 1..745                                   |         |                      |
| GI Descrip. | (U72725) retrofit [Oryza longistaminata] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21923  | Seq. ID | OJ990305_08.9819.C19 |
| Gene No. | 45632  | Strand  | +                    |
| Start    | 1  | End     | 745                  |
| Name     | OJ990305_08.9819.C19.o1.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 55   | End     | 435                  |
| GI       | none   | Score   | 97                   |
| Exons    | 55..177, 60..176, 214..279, 216..281, 298..435 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21923  | Seq. ID | OJ990305_08.9819.C19 |
| Gene No. | 45632  | Strand  | +                    |
| Start    | 1  | End     | 745                  |
| Name     | OJ990305_08.9819.C19.o1.tc                       | Method  | TBLASTX:Cress        |
| Start    | 252  | End     | 540                  |
| GI       | none   | Score   | 66                   |
| Exons    | 252..275, 253..318, 348..464, 349..462, 463..540 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21923                                  | Seq. ID | OJ990305_08.9819.C19 |
| Gene No. | 45632                                  | Strand  | +                    |
| Start    | 1                                      | End     | 745                  |
| Name     | OJ990305_08.9819.C19.o1.ts             | Method  | TBLASTX:Soybean      |
| Start    | 253                                    | End     | 591                  |
| GI       | none                                   | Score   | 70                   |
| Exons    | 253..339, 351..455, 352..459, 475..591 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21924   | Seq. ID | OJ990305_08.9819.C23 |
| Gene No.    | 45633   | Strand  | +                    |
| Start       | 1   | End     | 660                  |
| Name        | OJ990305_08.9819.C23.o1.np                          | Method  | AAT/NAP              |
| Start       | 1   | End     | 660                  |
| GI          | 4680179   | Score   | 598                  |
| Exons       | 1..660  |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21924                        | Seq. ID | OJ990305_08.9819.C23 |
| Gene No. | 45633                        | Strand  | +                    |
| Start    | 1                            | End     | 660                  |
| Name     | OJ990305_08.9819.C23.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 196                          | End     | 603                  |
| GI       | none                         | Score   | 420                  |
| Exons    | 196..603, 213..551, 226..597 |         |                      |

Seq. No. 21924  
Gene No. 45633  
Start 1  
Name OJ990305\_08.9819.C23.o1.gs  
Start 212  
GI none  
Exons 212..597

Seq. ID OJ990305\_08.9819.C23  
Strand +  
End 660  
Method GENSCAN  
End 597  
Score .86

Seq. No. 21924  
Gene No. 45633  
Start 1  
Name OJ990305\_08.9819.C23.o1.tm  
Start 258  
GI none  
Exons 258..518, 259..519

Seq. ID OJ990305\_08.9819.C23  
Strand +  
End 660  
Method TBLASTX:Maize  
End 519  
Score 284

Seq. No. 21925  
Gene No. 45634  
Start 9  
Name OJ990305\_08.9819.C24.o1.gs  
Start 9  
GI none  
Exons 9..168

Seq. ID OJ990305\_08.9819.C24  
Strand -  
End 168  
Method GENSCAN  
End 168  
Score .93

Seq. No. 21926  
Gene No. 45635  
Start 227  
Name OJ990305\_08.9819.C26.o1.np  
Start 227  
GI 3355623  
Exons 227..399, 595..741  
GI Descrip. (AJ000240) partial sequence, homology to GDP dissociation inhibitor [Hordeum vulgare]

Seq. ID OJ990305\_08.9819.C26  
Strand -  
End 741  
Method AAT/NAP  
End 741  
Score 204

Seq. No. 21926  
Gene No. 45635  
Start 227  
Name OJ990305\_08.9819.C26.o1.gs  
Start 316  
GI none  
Exons 316..399, 595..648

Seq. ID OJ990305\_08.9819.C26  
Strand -  
End 741  
Method GENSCAN  
End 648  
Score .75

Seq. No. 21926  
Gene No. 45635  
Start 227  
Name OJ990305\_08.9819.C26.o1.tc  
Start 316  
GI none  
Exons 316..402, 317..400, 592..660, 593..658, 595..666

Seq. ID OJ990305\_08.9819.C26  
Strand -  
End 741  
Method TBLASTX:Cress  
End 666  
Score 93

Seq. No. 21927  
Gene No. 45636  
Start 1  
Name OJ990305\_08.9819.C30.o1.np  
Start 1  
GI 6539553  
Exons 1..464

Seq. ID OJ990305\_08.9819.C30  
Strand -  
End 464  
Method AAT/NAP  
End 464  
Score 566

GI Descrip. (AP000836) Similar to Oryza australiensis retrotransposon RIRE1 (D85597) [Oryza sativa] gi|6539590|dbj|BAA88206.1| (AP000837) Similar to Oryza australiensis retrotransposon RIRE1 (D85597) [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21927                      | Seq. ID | OJ990305_08.9819.C30 |
| Gene No. | 45637                      | Strand  | -                    |
| Start    | 4446                       | End     | 5406                 |
| Name     | OJ990305_08.9819.C30.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 121                        | End     | 335                  |
| GI       | none                       | Score   | 175                  |
| Exons    | 121..327, 126..335         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21927                      | Seq. ID | OJ990305_08.9819.C30 |
| Gene No. | 45637                      | Strand  | -                    |
| Start    | 4446                       | End     | 5406                 |
| Name     | OJ990305_08.9819.C30.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 124                        | End     | 470                  |
| GI       | none                       | Score   | 207                  |
| Exons    | 124..459, 126..470         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21927                      | Seq. ID | OJ990305_08.9819.C30 |
| Gene No. | 45637                      | Strand  | -                    |
| Start    | 4446                       | End     | 5406                 |
| Name     | OJ990305_08.9819.C30.o2.gs | Method  | GENSCAN              |
| Start    | 4446                       | End     | 5399                 |
| GI       | none                       | Score   | .96                  |
| Exons    | 4446..5399                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21927   | Seq. ID | OJ990305_08.9819.C30 |
| Gene No.    | 45637   | Strand  | -                    |
| Start       | 4446  | End     | 5406                 |
| Name        | OJ990305_08.9819.C30.o2.np                      | Method  | AAT/NAP              |
| Start       | 4455  | End     | 5406                 |
| GI          | 4191255   | Score   | 782                  |
| Exons       | 4455..5406                                      |         |                      |
| GI Descrip. | (AJ132323) chalcone synthase [Casuarina glauca] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21927  | Seq. ID | OJ990305_08.9819.C30 |
| Gene No. | 45637  | Strand  | -                    |
| Start    | 4446   | End     | 5406                 |
| Name     | OJ990305_08.9819.C30.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4458   | End     | 5405                 |
| GI       | none   | Score   | 49                   |
| Exons    | 4458..4538, 4471..4539, 4551..4721, 4591..4719, 4785..5279, 5017..5277, 5343..5405 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21927  | Seq. ID | OJ990305_08.9819.C30 |
| Gene No. | 45637  | Strand  | -                    |
| Start    | 4446   | End     | 5406                 |
| Name     | OJ990305_08.9819.C30.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 4464   | End     | 5279                 |
| GI       | none   | Score   | 58                   |
| Exons    | 4464..4547, 4468..4539, 4494..4721, 4585..4719, 4791..4931, 4804..4914, 4980..5279, 5017..5070, 5131..5277 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21927 | Seq. ID | OJ990305_08.9819.C30 |
|----------|-------|---------|----------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 45637  | Strand | -             |
| Start    | 4446   | End    | 5406          |
| Name     | OJ990305_08.9819.C30.o1.tm   | Method | TBLASTX:Maize |
| Start    | 4464   | End    | 5405          |
| GI       | none   | Score  | 48            |
| Exons    | 4464..4547, 4471..4539, 4494..4721, 4585..4719, 4785..4931, 4980..5102, 4980..5279, 4981..5277, 5337..5405, 5343..5405 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21928                      | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45638                      | Strand  | +                    |
| Start    | 2592                       | End     | 3261                 |
| Name     | OJ990305_08.9819.C31.o2.np | Method  | AAT/NAP              |
| Start    | 2592                       | End     | 3261                 |
| GI       | 6630696                    | Score   | 990                  |
| Exons    | 2592..3261                 |         |                      |

GI Descrip. (AP000969) ESTs D22114(C10364), AU076106(E20423) correspond to a region of the predicted gene.; Similar to retrovirus-related pol polyprotein from transposon Tnt 1-94. (P10978) [Oryza sativa]

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21928                                    | Seq. ID | OJ990305_08.9819.C31 |
| Gene No.    | 45639                                    | Strand  | +                    |
| Start       | 19485                                    | End     | 26550                |
| Name        | OJ990305_08.9819.C31.o3.np               | Method  | AAT/NAP              |
| Start       | 19473                                    | End     | 23816                |
| GI          | 2586082                                  | Score   | 4599                 |
| Exons       | 19473..21849, 21877..23816               |         |                      |
| GI Descrip. | (U72725) retrofit [Oryza longistaminata] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45639  | Strand  | +                    |
| Start    | 19485  | End     | 26550                |
| Name     | OJ990305_08.9819.C31.o5.gs   | Method  | GENSCAN              |
| Start    | 19485  | End     | 26550                |
| GI       | none   | Score   | .8                   |
| Exons    | 19485..23730, 24521..24636, 25399..25496, 25758..26043, 26386..26550 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21928   | Seq. ID | OJ990305_08.9819.C31 |
| Gene No.    | 45639   | Strand  | +                    |
| Start       | 19485   | End     | 26550                |
| Name        | OJ990305_08.9819.C31.o5.np  | Method  | AAT/NAP              |
| Start       | 21800   | End     | 26523                |
| GI          | 6069646   | Score   | 277                  |
| Exons       | 21800..21821, 25211..25248, 25530..26523  |         |                      |
| GI Descrip. | (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi 6907112 dbj BAA90639.1  (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21928                      | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45640                      | Strand  | -                    |
| Start    | 1                          | End     | 572                  |
| Name     | OJ990305_08.9819.C31.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 572                  |
| GI       | 6684426                    | Score   | 193                  |
| Exons    | 1..64, 373..572            |         |                      |



GI Descrip. (AF112105) chalcone synthase [Arabis procurrens]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21928                      | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45640                      | Strand  | -                    |
| Start    | 1                          | End     | 572                  |
| Name     | OJ990305_08.9819.C31.o1.gs | Method  | GENSCAN              |
| Start    | 377                        | End     | 566                  |
| GI       | none                       | Score   | .9                   |
| Exons    | 377..566                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21928                      | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641                      | Strand  | -                    |
| Start    | 4342                       | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o4.ts | Method  | TBLASTX:Soybean      |
| Start    | 375                        | End     | 545                  |
| GI       | none                       | Score   | 108                  |
| Exons    | 375..545, 379..540         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21928                      | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641                      | Strand  | -                    |
| Start    | 4342                       | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o5.tc | Method  | TBLASTX:Cress        |
| Start    | 375                        | End     | 545                  |
| GI       | none                       | Score   | 110                  |
| Exons    | 375..545, 379..519         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21928                      | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641                      | Strand  | -                    |
| Start    | 4342                       | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o9.tm | Method  | TBLASTX:Maize        |
| Start    | 375                        | End     | 575                  |
| GI       | none                       | Score   | 138                  |
| Exons    | 375..575, 379..522         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641  | Strand  | -                    |
| Start    | 4342   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 2638   | End     | 23846                |
| GI       | none   | Score   | 109                  |
| Exons    | 2638..2769, 2788..3012, 23169..23783, 23171..23296, 23363..23773, 23817..23846 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21928                                  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641                                  | Strand  | -                    |
| Start    | 4342                                   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o5.tm             | Method  | TBLASTX:Maize        |
| Start    | 2638                                   | End     | 23294                |
| GI       | none                                   | Score   | 113                  |
| Exons    | 2638..2757, 23102..23293, 23103..23294 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21928                      | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641                      | Strand  | -                    |
| Start    | 4342                       | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o2.tc | Method  | TBLASTX:Cress        |
| Start    | 2641                       | End     | 23792                |
| GI       | none                       | Score   | 82                   |

Exons 2641..2769, 23148..23351, 23361..23432, 23442..23564,  
23598..23792

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21928   | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641   | Strand  | -                    |
| Start    | 4342  | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o1.tw  | Method  | TBLASTX:Wheat        |
| Start    | 2649  | End     | 23561                |
| GI       | none  | Score   | 97                   |
| Exons    | 2649..2723, 2650..2724, 2650..2730, 2739..3125, 2740..3123,<br>23211..23285, 23346..23561, 23366..23557 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641  | Strand  | -                    |
| Start    | 4342   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o7.tw   | Method  | TBLASTX:Wheat        |
| Start    | 3404   | End     | 3760                 |
| GI       | none   | Score   | 87                   |
| Exons    | 3404..3436, 3474..3542, 3481..3543, 3543..3620, 3545..3613,<br>3546..3620, 3547..3621, 3571..3720, 3619..3732, 3629..3736,<br>3728..3760 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21928                      | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641                      | Strand  | -                    |
| Start    | 4342                       | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o2.gs | Method  | GENSCAN              |
| Start    | 4342                       | End     | 5045                 |
| GI       | none                       | Score   | .62                  |
| Exons    | 4342..4442, 4985..5045     |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21928   | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641   | Strand  | -                    |
| Start    | 4342  | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o10.tm   | Method  | TBLASTX:Maize        |
| Start    | 18526   | End     | 18895                |
| GI       | none  | Score   | 128                  |
| Exons    | 18526..18570, 18669..18857, 18674..18850, 18674..18895,<br>18798..18884 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21928                      | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641                      | Strand  | -                    |
| Start    | 4342                       | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o5.tw | Method  | TBLASTX:Wheat        |
| Start    | 19491                      | End     | 19868                |
| GI       | none                       | Score   | 229                  |
| Exons    | 19491..19868               |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21928                      | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641                      | Strand  | -                    |
| Start    | 4342                       | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o4.tc | Method  | TBLASTX:Cress        |
| Start    | 19545                      | End     | 20066                |
| GI       | none                       | Score   | 79                   |
| Exons    | 19545..19673, 19692..20066 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21928 | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641 | Strand  | -                    |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Start    | 4342   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o3.tm                             | Method  | TBLASTX:Maize        |
| Start    | 19568  | End     | 19988                |
| GI       | none   | Score   | 117                  |
| Exons    | 19568..19678, 19569..19679, 19692..19988, 19742..19981 |         |                      |
|          |  |         |                      |
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641  | Strand  | -                    |
| Start    | 4342   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o6.tw                             | Method  | TBLASTX:Wheat        |
| Start    | 19869  | End     | 20153                |
| GI       | none   | Score   | 187                  |
| Exons    | 19869..20153, 19884..20027                             |         |                      |
|          |  |         |                      |
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641  | Strand  | -                    |
| Start    | 4342   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o2.tw                             | Method  | TBLASTX:Wheat        |
| Start    | 20396  | End     | 20749                |
| GI       | none   | Score   | 428                  |
| Exons    | 20396..20749, 20397..20744                             |         |                      |
|          |  |         |                      |
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641  | Strand  | -                    |
| Start    | 4342   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o6.tm                             | Method  | TBLASTX:Maize        |
| Start    | 20454  | End     | 20756                |
| GI       | none   | Score   | 260                  |
| Exons    | 20454..20756, 20454..20744                             |         |                      |
|          |  |         |                      |
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641  | Strand  | -                    |
| Start    | 4342   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o5.ts                             | Method  | TBLASTX:Soybean      |
| Start    | 20835  | End     | 21236                |
| GI       | none   | Score   | 70                   |
| Exons    | 20835..20921, 20933..21037, 20934..21041, 21057..21236 |         |                      |
|          |  |         |                      |
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641  | Strand  | -                    |
| Start    | 4342   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o1.tc                             | Method  | TBLASTX:Cress        |
| Start    | 21231  | End     | 21695                |
| GI       | none   | Score   | 337                  |
| Exons    | 21231..21695   |         |                      |
|          |  |         |                      |
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641  | Strand  | -                    |
| Start    | 4342   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o4.tm                             | Method  | TBLASTX:Maize        |
| Start    | 21240  | End     | 21665                |
| GI       | none   | Score   | 68                   |
| Exons    | 21240..21329, 21306..21665                             |         |                      |
|          |  |         |                      |
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641  | Strand  | -                    |
| Start    | 4342   | End     | 23846                |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990305_08.9819.C31.o3.ts   | Method  | TBLASTX:Soybean      |
| Start       | 21258  | End     | 21677                |
| GI          | none   | Score   | 280                  |
| Exons       | 21258..21677   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No.    | 45641  | Strand  | -                    |
| Start       | 4342   | End     | 23846                |
| Name        | OJ990305_08.9819.C31.o4.tw   | Method  | TBLASTX:Wheat        |
| Start       | 21348  | End     | 21733                |
| GI          | none   | Score   | 282                  |
| Exons       | 21348..21683, 21351..21686, 21428..21733                             |         |                      |
|             |  |         |                      |
| Seq. No.    | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No.    | 45641  | Strand  | -                    |
| Start       | 4342   | End     | 23846                |
| Name        | OJ990305_08.9819.C31.o2.ts   | Method  | TBLASTX:Soybean      |
| Start       | 22287  | End     | 22787                |
| GI          | 5509260  | Score   | 418                  |
| Exons       | 22287..22787, 22409..22573, 22615..22746                             |         |                      |
| GI Descrip. | -  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No.    | 45641  | Strand  | -                    |
| Start       | 4342   | End     | 23846                |
| Name        | OJ990305_08.9819.C31.o8.tm   | Method  | TBLASTX:Maize        |
| Start       | 22334  | End     | 22586                |
| GI          | none   | Score   | 219                  |
| Exons       | 22334..22585, 22335..22586   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No.    | 45641  | Strand  | -                    |
| Start       | 4342   | End     | 23846                |
| Name        | OJ990305_08.9819.C31.o3.tc   | Method  | TBLASTX:Cress        |
| Start       | 22396  | End     | 22673                |
| GI          | none   | Score   | 295                  |
| Exons       | 22396..22461, 22403..22654, 22404..22673, 22483..22665               |         |                      |
|             |  |         |                      |
| Seq. No.    | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No.    | 45641  | Strand  | -                    |
| Start       | 4342   | End     | 23846                |
| Name        | OJ990305_08.9819.C31.o3.tw   | Method  | TBLASTX:Wheat        |
| Start       | 22454  | End     | 23117                |
| GI          | none   | Score   | 291                  |
| Exons       | 22454..22582, 22455..22799, 22615..22680, 22791..22994, 23019..23117 |         |                      |
|             |  |         |                      |
| Seq. No.    | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No.    | 45641  | Strand  | -                    |
| Start       | 4342   | End     | 23846                |
| Name        | OJ990305_08.9819.C31.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 22587  | End     | 23033                |
| GI          | none   | Score   | 403                  |
| Exons       | 22587..23033   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No.    | 45641  | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 4342                                     | End    | 23846         |
| Name  | OJ990305_08.9819.C31.o6.tc               | Method | TBLASTX:Cress |
| Start | 22854                                    | End    | 23102         |
| GI    | none                                     | Score  | 196           |
| Exons | 22854..23102, 22854..22994, 23030..23101 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21928  | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45641  | Strand  | -                    |
| Start    | 4342   | End     | 23846                |
| Name     | OJ990305_08.9819.C31.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 23295  | End     | 23759                |
| GI       | none   | Score   | 42                   |
| Exons    | 23295..23357, 23336..23470, 23337..23465, 23471..23758, 23472..23759 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21928                                    | Seq. ID | OJ990305_08.9819.C31 |
| Gene No. | 45642                                    | Strand  | -                    |
| Start    | 25924                                    | End     | 26514                |
| Name     | OJ990305_08.9819.C31.o7.tm               | Method  | TBLASTX:Maize        |
| Start    | 25924                                    | End     | 26514                |
| GI       | none                                     | Score   | 81                   |
| Exons    | 25924..26013, 26068..26256, 26371..26514 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21929                      | Seq. ID | OJ990305_08.9819.C32 |
| Gene No. | 45643                      | Strand  | +                    |
| Start    | 312                        | End     | 1046                 |
| Name     | OJ990305_08.9819.C32.o1.gs | Method  | GENSCAN              |
| Start    | 312                        | End     | 1046                 |
| GI       | none                       | Score   | .84                  |
| Exons    | 312..1046                  |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21929  | Seq. ID | OJ990305_08.9819.C32 |
| Gene No.    | 45644  | Strand  | +                    |
| Start       | 2030   | End     | 6725                 |
| Name        | OJ990305_08.9819.C32.o1.np   | Method  | AAT/NAP              |
| Start       | 2030   | End     | 6725                 |
| GI          | 2501850  | Score   | 1241                 |
| Exons       | 2030..2116, 2552..2614, 2810..2893, 3165..3272, 3363..3535, 4285..4396, 4743..4823, 4911..4973, 5428..5529, 6267..6725 |         |                      |
| GI Descrip. | (AF012823) GDP dissociation inhibitor [Nicotiana tabacum]  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21929  | Seq. ID | OJ990305_08.9819.C32 |
| Gene No. | 45644  | Strand  | +                    |
| Start    | 2030   | End     | 6725                 |
| Name     | OJ990305_08.9819.C32.o2.gs   | Method  | GENSCAN              |
| Start    | 2030   | End     | 4453                 |
| GI       | none   | Score   | .85                  |
| Exons    | 2030..2116, 2552..2614, 2810..2893, 3165..3272, 3363..3535, 4285..4453 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21929                      | Seq. ID | OJ990305_08.9819.C32 |
| Gene No. | 45644                      | Strand  | +                    |
| Start    | 2030                       | End     | 6725                 |
| Name     | OJ990305_08.9819.C32.o2.gp | Method  | AAT/GAP              |
| Start    | 2120                       | End     | 2187                 |
| GI       | 53415_1.R1084              | Score   | 63                   |
| Exons    | 2120..2187                 |         |                      |

GI Descrip. '130897/sp|P20664|PRI1 MOUSE 9.0e-18 DNA PRIMASE SMALL SUBUNIT  
(DNA PRIMASE 49 KD SUBUNIT) (P49) >gi\_423418\_pir\_\_D46642 DNA  
primase (EC 2.7.7.-) 46K chain - mouse  
>gi\_303661\_dbj\_BAA02744.1\_ (D13544) primase small subunit [Mus  
musculus]'

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21929  | Seq. ID | OJ990305_08.9819.C32 |
| Gene No.    | 45645  | Strand  | -                    |
| Start       | 1971   | End     | 6414                 |
| Name        | OJ990305_08.9819.C32.ol.gp   | Method  | AAT/GAP              |
| Start       | 1971   | End     | 2235                 |
| GI          | uC-osflM202075d10b1  | Score   | 256                  |
| Exons       | 1971..2121, 2211..2235   |         |                      |
| GI Descrip. | '3355623/emb CAA03964  1.0e-17 (AJ000240) partial sequence,<br>homology to GDP dissociation inhibitor [Hordeum vulgare]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21929  | Seq. ID | OJ990305_08.9819.C32 |
| Gene No. | 45645  | Strand  | -                    |
| Start    | 1971   | End     | 6414                 |
| Name     | OJ990305_08.9819.C32.ol.tm   | Method  | TBLASTX:Maize        |
| Start    | 2014   | End     | 6327                 |
| GI       | none   | Score   | 151                  |
| Exons    | 2014..2118, 2018..2122, 2547..2603, 2549..2617, 2549..2614,<br>2551..2616, 2798..2893, 2807..2893, 2809..2898, 3163..3273,<br>3163..3270, 3164..3271, 3165..3275, 3342..3536, 3360..3533,<br>3361..3537, 3362..3535, 4279..4395, 4286..4411, 4286..4396,<br>4737..4823, 4741..4830, 4742..4822, 4902..4982, 4902..4982,<br>4909..4983, 4909..5001, 5425..5535, 5430..5531, 6264..6326,<br>6265..6327, 6266..6325, 6273..6326 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21929   | Seq. ID | OJ990305_08.9819.C32 |
| Gene No. | 45645   | Strand  | -                    |
| Start    | 1971  | End     | 6414                 |
| Name     | OJ990305_08.9819.C32.ol.tc  | Method  | TBLASTX:Cress        |
| Start    | 2029  | End     | 6414                 |
| GI       | none  | Score   | 131                  |
| Exons    | 2029..2121, 2030..2122, 2543..2614, 2549..2617, 2551..2616,<br>2807..2893, 2809..2898, 3164..3274, 3165..3275, 3342..3536,<br>3365..3532, 4273..4419, 4286..4411, 4737..4823, 4742..4825,<br>4742..4819, 4902..4982, 4902..4982, 4909..4983, 4916..4990,<br>5425..5535, 5430..5513, 6255..6410, 6265..6414, 6266..6403,<br>6276..6404 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21929   | Seq. ID | OJ990305_08.9819.C32 |
| Gene No. | 45645   | Strand  | -                    |
| Start    | 1971  | End     | 6414                 |
| Name     | OJ990305_08.9819.C32.ol.ts  | Method  | TBLASTX:Soybean      |
| Start    | 2029  | End     | 6410                 |
| GI       | none  | Score   | 135                  |
| Exons    | 2029..2118, 2030..2122, 2549..2617, 2549..2614, 2551..2616,<br>2807..2893, 2809..2898, 3164..3274, 3165..3275, 3342..3536,<br>3360..3530, 3368..3532, 4285..4419, 4286..4411, 4737..4823,<br>4745..4825, 4748..4819, 4899..4982, 4902..4982, 4907..5002,<br>4909..4983, 5425..5535, 5430..5531, 6264..6410, 6266..6403,<br>6276..6404 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21929 | Seq. ID | OJ990305_08.9819.C32 |
|----------|-------|---------|----------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 45645  | Strand | -             |
| Start    | 1971   | End    | 6414          |
| Name     | OJ990305_08.9819.C32.o1.tw   | Method | TBLASTX:Wheat |
| Start    | 2547   | End    | 3497          |
| GI       | none   | Score  | 56            |
| Exons    | 2547..2603, 2550..2603, 2551..2610, 2555..2617, 2798..2893, 2806..2898, 2807..2893, 3164..3271, 3165..3275, 3342..3497, 3362..3496 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21929  | Seq. ID | OJ990305_08.9819.C32 |
| Gene No. | 45645  | Strand  | -                    |
| Start    | 1971   | End     | 6414                 |
| Name     | OJ990305_08.9819.C32.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4770   | End     | 6410                 |
| GI       | none   | Score   | 101                  |
| Exons    | 4770..4823, 4771..4830, 4772..4822, 4902..4982, 4909..4983, 4909..4983, 5425..5535, 5430..5531, 6255..6410, 6266..6403, 6276..6404 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21930   | Seq. ID | OJ990305_08.9819.C33 |
| Gene No.    | 45646   | Strand  | +                    |
| Start       | 1   | End     | 7227                 |
| Name        | OJ990305_08.9819.C33.o1.np                              | Method  | AAT/NAP              |
| Start       | 1   | End     | 1879                 |
| GI          | 3175990   | Score   | 327                  |
| Exons       | 1..51, 619..1194, 1289..1363, 1832..1879                |         |                      |
| GI Descrip. | (AJ005836) GDP dissociation inhibitor [Cicer arietinum] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21930  | Seq. ID | OJ990305_08.9819.C33 |
| Gene No. | 45646  | Strand  | +                    |
| Start    | 1  | End     | 7227                 |
| Name     | OJ990305_08.9819.C33.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1023   | End     | 1399                 |
| GI       | none   | Score   | 240                  |
| Exons    | 1023..1193, 1024..1194, 1042..1209, 1049..1195, 1277..1399, 1288..1380, 1289..1387 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21930  | Seq. ID | OJ990305_08.9819.C33 |
| Gene No. | 45646  | Strand  | +                    |
| Start    | 1  | End     | 7227                 |
| Name     | OJ990305_08.9819.C33.o2.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 1023   | End     | 1399                 |
| GI       | none   | Score   | 235                  |
| Exons    | 1023..1193, 1024..1191, 1270..1380, 1276..1362, 1277..1399 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21930  | Seq. ID | OJ990305_08.9819.C33 |
| Gene No. | 45646  | Strand  | +                    |
| Start    | 1  | End     | 7227                 |
| Name     | OJ990305_08.9819.C33.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 1024   | End     | 1399                 |
| GI       | none   | Score   | 235                  |
| Exons    | 1024..1194, 1026..1193, 1277..1399, 1288..1362 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21930                      | Seq. ID | OJ990305_08.9819.C33 |
| Gene No. | 45646                      | Strand  | +                    |
| Start    | 1                          | End     | 7227                 |
| Name     | OJ990305_08.9819.C33.o1.gs | Method  | GENSCAN              |

|       |  |       |      |
|-------|--|-------|------|
| Start | 1028   | End   | 6446 |
| GI    | none   | Score | .64  |
| Exons | 1028..1194, 1289..1363, 2038..2056, 2086..2168, 2666..2875, 4481..4713, 5076..5217, 5526..6098, 6333..6446 |       |      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21930                      | Seq. ID | OJ990305_08.9819.C33 |
| Gene No. | 45646                      | Strand  | +                    |
| Start    | 1                          | End     | 7227                 |
| Name     | OJ990305_08.9819.C33.o1.gp | Method  | AAT/GAP              |
| Start    | 1545                       | End     | 1683                 |
| GI       | none                       | Score   | 274                  |
| Exons    | 1545..1683                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21930  | Seq. ID | OJ990305_08.9819.C33 |
| Gene No.    | 45646  | Strand  | +                    |
| Start       | 1  | End     | 7227                 |
| Name        | OJ990305_08.9819.C33.o2.np   | Method  | AAT/NAP              |
| Start       | 5098   | End     | 7227                 |
| GI          | 6911848  | Score   | 1177                 |
| Exons       | 5098..5217, 5526..6098, 6333..6487, 7183..7227   |         |                      |
| GI Descrip. | (AL138649) n-acetylglucosaminyl-phosphatidylinositol-like protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21930  | Seq. ID | OJ990305_08.9819.C33 |
| Gene No. | 45646  | Strand  | +                    |
| Start    | 1  | End     | 7227                 |
| Name     | OJ990305_08.9819.C33.o2.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 5110   | End     | 5648                 |
| GI       | none   | Score   | 190                  |
| Exons    | 5110..5220, 5112..5219, 5523..5648, 5523..5639, 5525..5641 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21930                              | Seq. ID | OJ990305_08.9819.C33 |
| Gene No. | 45646                              | Strand  | +                    |
| Start    | 1                                  | End     | 7227                 |
| Name     | OJ990305_08.9819.C33.o1.tm         | Method  | TBLASTX:Maize        |
| Start    | 5612                               | End     | 6101                 |
| GI       | none                               | Score   | 626                  |
| Exons    | 5612..6100, 5612..6094, 5613..6101 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21931  | Seq. ID | OJ990305_08.9819.C34 |
| Gene No.    | 45647  | Strand  | +                    |
| Start       | 1  | End     | 2419                 |
| Name        | OJ990305_08.9819.C34.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 1569                 |
| GI          | 6911848  | Score   | 422                  |
| Exons       | 1..389, 624..720, 813..934, 1103..1206, 1317..1407, 1480..1569                           |         |                      |
| GI Descrip. | (AL138649) n-acetylglucosaminyl-phosphatidylinositol-like protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21931                                      | Seq. ID | OJ990305_08.9819.C34 |
| Gene No. | 45647                                      | Strand  | +                    |
| Start    | 1  | End     | 2419                 |
| Name     | OJ990305_08.9819.C34.o1.gs                 | Method  | GENSCAN              |
| Start    | 626  | End     | 2419                 |
| GI       | none                                       | Score   | .6                   |
| Exons    | 626..716, 818..934, 1103..1206, 2248..2419 |         |                      |



|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21931  | Seq. ID | OJ990305_08.9819.C34 |
| Gene No. | 45648  | Strand  | -                    |
| Start    | 890  | End     | 5772                 |
| Name     | OJ990305_08.9819.C34.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 623  | End     | 1355                 |
| GI       | none   | Score   | 150                  |
| Exons    | 623..772, 624..719, 625..729, 815..937, 817..948, 827..937, 1102..1218, 1103..1219, 1105..1218, 1315..1353, 1317..1355 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21931  | Seq. ID | OJ990305_08.9819.C34 |
| Gene No.    | 45648  | Strand  | -                    |
| Start       | 890  | End     | 5772                 |
| Name        | OJ990305_08.9819.C34.o2.np   | Method  | AAT/NAP              |
| Start       | 890  | End     | 5772                 |
| GI          | 6433991  | Score   | 358                  |
| Exons       | 890..967, 2936..3036, 3229..3331, 3406..3549, 3621..3708, 4612..4709, 4793..4911, 5509..5618, 5711..5772 |         |                      |
| GI Descrip. | (AL132798) mak16-like protein [Schizosaccharomyces pombe]  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21931  | Seq. ID | OJ990305_08.9819.C34 |
| Gene No. | 45648  | Strand  | -                    |
| Start    | 890  | End     | 5772                 |
| Name     | OJ990305_08.9819.C34.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1097   | End     | 1509                 |
| GI       | none   | Score   | 131                  |
| Exons    | 1097..1219, 1111..1218, 1315..1407, 1317..1406, 1477..1509, 1479..1508 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21931  | Seq. ID | OJ990305_08.9819.C34 |
| Gene No.    | 45648  | Strand  | -                    |
| Start       | 890  | End     | 5772                 |
| Name        | OJ990305_08.9819.C34.o1.gp   | Method  | AAT/GAP              |
| Start       | 2332   | End     | 3031                 |
| GI          | 27063_1.R1084  | Score   | 938                  |
| Exons       | 2332..2721, 2924..3031   |         |                      |
| GI Descrip. | '1109826/gb AAB47596.1  3.0e-16 (U41534) similar to yeast MAK16 protein (SP:MK16_YEAST,P10962) [Caenorhabditis elegans]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21931  | Seq. ID | OJ990305_08.9819.C34 |
| Gene No. | 45648  | Strand  | -                    |
| Start    | 890  | End     | 5772                 |
| Name     | OJ990305_08.9819.C34.o2.gs   | Method  | GENSCAN              |
| Start    | 2674   | End     | 5769                 |
| GI       | none   | Score   | .86                  |
| Exons    | 2674..2721, 2924..3036, 3229..3331, 3415..3549, 3621..3708, 4612..4709, 4793..4911, 5509..5618, 5711..5769 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21931  | Seq. ID | OJ990305_08.9819.C34 |
| Gene No. | 45648  | Strand  | -                    |
| Start    | 890  | End     | 5772                 |
| Name     | OJ990305_08.9819.C34.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 2918   | End     | 5772                 |
| GI       | none   | Score   | 79                   |
| Exons    | 2918..3037, 2922..3044, 3274..3297, 3412..3549, 3439..3573, 3615..3713, 3624..3707, 4589..4708, 4608..4709, 4611..4709, 4612..4710, 4773..4916, 4793..4912, 5498..5629, 5505..5621, 5710..5772, 5711..5758 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21931  | Seq. ID | OJ990305_08.9819.C34 |
| Gene No. | 45648  | Strand  | -                    |
| Start    | 890  | End     | 5772                 |
| Name     | OJ990305_08.9819.C34.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 2918   | End     | 5772                 |
| GI       | none   | Score   | 79                   |
| Exons    | 2918..3037, 2922..3044, 3274..3297, 3412..3549, 3439..3573, 3615..3713, 3624..3707, 4589..4708, 4608..4709, 4611..4709, 4612..4710, 4773..4916, 4793..4912, 5498..5629, 5505..5621, 5710..5772, 5711..5758 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21931  | Seq. ID | OJ990305_08.9819.C34 |
| Gene No.    | 45648  | Strand  | -                    |
| Start       | 890  | End     | 5772                 |
| Name        | OJ990305_08.9819.C34.o2.gp   | Method  | AAT/GAP              |
| Start       | 3423   | End     | 4833                 |
| GI          | 427797   | Score   | 640                  |
| Exons       | 3423..3549, 3621..3708, 4612..4709, 4793..4833   |         |                      |
| GI Descrip. | 1109826/gb AAB47596.1  3.0e-16 (U41534) similar to yeast MAK16 protein (SP:MK16_YEAST,P10962) [Caenorhabditis elegans] |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21932                        | Seq. ID | OJ990305_08.9819.C37 |
| Gene No. | 45649                        | Strand  | -                    |
| Start    | 118                          | End     | 366                  |
| Name     | OJ990305_08.9819.C37.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 118                          | End     | 366                  |
| GI       | none                         | Score   | 195                  |
| Exons    | 118..366, 138..251, 202..363 |         |                      |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45650  | Strand  | +                   |
| Start    | 4033   | End     | 9218                |
| Name     | OJ990105_06.9819.C2.o2.gs  | Method  | GENSCAN             |
| Start    | 4033   | End     | 9191                |
| GI       | none   | Score   | .55                 |
| Exons    | 4033..4113, 5207..5429, 5771..6034, 6236..6430, 6638..7305, 7521..7664, 7913..8233, 8499..9191 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 21933   | Seq. ID | OJ990105_06.9819.C2 |
| Gene No.    | 45650   | Strand  | +                   |
| Start       | 4033  | End     | 9218                |
| Name        | OJ990105_06.9819.C2.o4.np   | Method  | AAT/NAP             |
| Start       | 5773  | End     | 9218                |
| GI          | 6630696   | Score   | 5181                |
| Exons       | 5773..9218  |         |                     |
| GI Descrip. | (AP000969) ESTs D22114(C10364), AU076106(E20423) correspond to a region of the predicted gene.; Similar to retrovirus-related pol polyprotein from transposon Tnt 1-94. (P10978) [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21933                     | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45651                     | Strand  | -                   |
| Start    | 1248                      | End     | 3419                |
| Name     | OJ990105_06.9819.C2.o1.np | Method  | AAT/NAP             |
| Start    | 1248                      | End     | 3307                |
| GI       | 6069646                   | Score   | 987                 |
| Exons    | 1248..2234, 2517..3307    |         |                     |

GI Descrip. (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi|6907112|dbj|BAA90639.1| (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa]

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45651  | Strand  | -                   |
| Start    | 1248   | End     | 3419                |
| Name     | OJ990105_06.9819.C2.o2.tm                      | Method  | TBLASTX:Maize       |
| Start    | 1261   | End     | 1829                |
| GI       | none   | Score   | 77                  |
| Exons    | 1261..1479, 1263..1475, 1494..1829, 1621..1761 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21933                     | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45651                     | Strand  | -                   |
| Start    | 1248                      | End     | 3419                |
| Name     | OJ990105_06.9819.C2.o7.tw | Method  | TBLASTX:Wheat       |
| Start    | 1374                      | End     | 1742                |
| GI       | none                      | Score   | 179                 |
| Exons    | 1374..1421, 1530..1742    |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 21933                              | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45651                              | Strand  | -                   |
| Start    | 1248                               | End     | 3419                |
| Name     | OJ990105_06.9819.C2.o8.tm          | Method  | TBLASTX:Maize       |
| Start    | 1947                               | End     | 2252                |
| GI       | none                               | Score   | 126                 |
| Exons    | 1947..2054, 2061..2252, 2062..2232 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45651  | Strand  | -                   |
| Start    | 1248   | End     | 3419                |
| Name     | OJ990105_06.9819.C2.o5.tw                                  | Method  | TBLASTX:Wheat       |
| Start    | 2217   | End     | 2657                |
| GI       | none   | Score   | 38                  |
| Exons    | 2217..2360, 2221..2274, 2259..2357, 2361..2657, 2584..2655 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45651  | Strand  | -                   |
| Start    | 1248   | End     | 3419                |
| Name     | OJ990105_06.9819.C2.o1.tm                      | Method  | TBLASTX:Maize       |
| Start    | 2292   | End     | 2984                |
| GI       | none   | Score   | 95                  |
| Exons    | 2292..2984, 2296..2502, 2586..2750, 2829..2972 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 21933                     | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45651                     | Strand  | -                   |
| Start    | 1248                      | End     | 3419                |
| Name     | OJ990105_06.9819.C2.o9.tw | Method  | TBLASTX:Wheat       |
| Start    | 2775                      | End     | 3059                |
| GI       | none                      | Score   | 55                  |
| Exons    | 2775..3059, 2854..2883    |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 21933 | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45651 | Strand  | -                   |
| Start    | 1248  | End     | 3419                |

Name OJ990105\_06.9819.C2.o4.tm  
 Start 2985  
 GI none  
 Exons 2985..3329, 3016..3315

Method TBLASTX:Maize  
 End 3329  
 Score 166

Seq. No. 21933  
 Gene No. 45651  
 Start 1248  
 Name OJ990105\_06.9819.C2.o8.tw  
 Start 3084  
 GI none  
 Exons 3084..3290, 3088..3327, 3285..3419

Seq. ID OJ990105\_06.9819.C2  
 Strand -  
 End 3419  
 Method TBLASTX:Wheat  
 End 3419  
 Score 82

Seq. No. 21933  
 Gene No. 45652  
 Start 3495  
 Name OJ990105\_06.9819.C2.o7.tm  
 Start 3495  
 GI none  
 Exons 3495..3821, 3598..3822

Seq. ID OJ990105\_06.9819.C2  
 Strand  
 End 3822  
 Method TBLASTX:Maize  
 End 3822  
 Score 110

Seq. No. 21933  
 Gene No. 45653  
 Start 5668  
 Name OJ990105\_06.9819.C2.o2.tw  
 Start 5668  
 GI none  
 Exons 5668..5802, 5685..5765, 5779..6063, 5868..5984, 5932..6063

Seq. ID OJ990105\_06.9819.C2  
 Strand  
 End 6099  
 Method TBLASTX:Wheat  
 End 6063  
 Score 90

Seq. No. 21933  
 Gene No. 45653  
 Start 5668  
 Name OJ990105\_06.9819.C2.o6.tm  
 Start 5815  
 GI none  
 Exons 5815..6099, 5818..6096

Seq. ID OJ990105\_06.9819.C2  
 Strand  
 End 6099  
 Method TBLASTX:Maize  
 End 6099  
 Score 255

Seq. No. 21933  
 Gene No. 45654  
 Start 6632  
 Name OJ990105\_06.9819.C2.o3.tm  
 Start 6632  
 GI none  
 Exons 6632..6913, 6633..6899, 6636..6926, 6637..6963, 6927..7022, 6928..7020

Seq. ID OJ990105\_06.9819.C2  
 Strand  
 End 7022  
 Method TBLASTX:Maize  
 End 7022  
 Score 232

Seq. No. 21933  
 Gene No. 45655  
 Start 7069  
 Name OJ990105\_06.9819.C2.o6.tw  
 Start 7069  
 GI none  
 Exons 7069..7407, 7144..7398, 7179..7406

Seq. ID OJ990105\_06.9819.C2  
 Strand  
 End 8158  
 Method TBLASTX:Wheat  
 End 7407  
 Score 256

Seq. No. 21933  
 Gene No. 45655  
 Start 7069

Seq. ID OJ990105\_06.9819.C2  
 Strand  
 End 8158

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Name        | OJ990105_06.9819.C2.o10.tm   | Method  | TBLASTX:Maize       |
| Start       | 7108   | End     | 7571                |
| GI          | none   | Score   | 187                 |
| Exons       | 7108..7479, 7437..7571   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No.    | 45655  | Strand  |                     |
| Start       | 7069   | End     | 8158                |
| Name        | OJ990105_06.9819.C2.o3.ts  | Method  | TBLASTX:Soybean     |
| Start       | 7360   | End     | 7757                |
| GI          | none   | Score   | 68                  |
| Exons       | 7360..7449, 7437..7589, 7442..7606, 7584..7757   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No.    | 45655  | Strand  |                     |
| Start       | 7069   | End     | 8158                |
| Name        | OJ990105_06.9819.C2.o1.tw  | Method  | TBLASTX:Wheat       |
| Start       | 7408   | End     | 8158                |
| GI          | none   | Score   | 42                  |
| Exons       | 7408..7449, 7436..7561, 7436..7843, 7437..7835, 7612..7869, 7613..7846, 7840..7956, 7844..7984, 7965..8153, 7970..8158, 7975..8154 |         |                     |
|             |  |         |                     |
| Seq. No.    | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No.    | 45656  | Strand  |                     |
| Start       | 8078   | End     | 9218                |
| Name        | OJ990105_06.9819.C2.o1.ts  | Method  | TBLASTX:Soybean     |
| Start       | 8078   | End     | 8540                |
| GI          | 5509260  | Score   | 125                 |
| Exons       | 8078..8263, 8248..8520, 8259..8540   |         |                     |
| GI Descrip. | -  |         |                     |
|             |  |         |                     |
| Seq. No.    | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No.    | 45656  | Strand  |                     |
| Start       | 8078   | End     | 9218                |
| Name        | OJ990105_06.9819.C2.o1.tc  | Method  | TBLASTX:Cress       |
| Start       | 8171   | End     | 8429                |
| GI          | none   | Score   | 102                 |
| Exons       | 8171..8266, 8172..8255, 8259..8429, 8361..8420   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No.    | 45656  | Strand  |                     |
| Start       | 8078   | End     | 9218                |
| Name        | OJ990105_06.9819.C2.o3.tw  | Method  | TBLASTX:Wheat       |
| Start       | 8213   | End     | 8960                |
| GI          | none   | Score   | 51                  |
| Exons       | 8213..8263, 8265..8540, 8529..8735, 8889..8960   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No.    | 45656  | Strand  |                     |
| Start       | 8078   | End     | 9218                |
| Name        | OJ990105_06.9819.C2.o9.tm  | Method  | TBLASTX:Maize       |
| Start       | 8213   | End     | 8522                |
| GI          | none   | Score   | 44                  |
| Exons       | 8213..8257, 8268..8522   |         |                     |
|             |  |         |                     |
| Seq. No.    | 21933  | Seq. ID | OJ990105_06.9819.C2 |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Gene No. | 45656  | Strand  |                     |
| Start    | 8078   | End     | 9218                |
| Name     | OJ990105_06.9819.C2.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 8588   | End     | 8935                |
| GI       | none   | Score   | 141                 |
| Exons    | 8588..8716, 8589..8747, 8748..8927, 8750..8935   |         |                     |
|          |  |         |                     |
| Seq. No. | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45656  | Strand  |                     |
| Start    | 8078   | End     | 9218                |
| Name     | OJ990105_06.9819.C2.o5.tm  | Method  | TBLASTX:Maize       |
| Start    | 8739   | End     | 9086                |
| GI       | none   | Score   | 311                 |
| Exons    | 8739..9086, 8753..9085   |         |                     |
|          |  |         |                     |
| Seq. No. | 21933  | Seq. ID | OJ990105_06.9819.C2 |
| Gene No. | 45656  | Strand  |                     |
| Start    | 8078   | End     | 9218                |
| Name     | OJ990105_06.9819.C2.o4.tw  | Method  | TBLASTX:Wheat       |
| Start    | 8961   | End     | 9218                |
| GI       | none   | Score   | 83                  |
| Exons    | 8961..9023, 8963..9016, 9017..9175, 9032..9181, 9033..9176, 9042..9191, 9175..9216, 9180..9218 |         |                     |
|          |  |         |                     |
| Seq. No. | 21934  | Seq. ID | OJ990105_06.9819.C3 |
| Gene No. | 45657  | Strand  | -                   |
| Start    | 1558   | End     | 3319                |
| Name     | OJ990105_06.9819.C3.o1.gs  | Method  | GENSCAN             |
| Start    | 1558   | End     | 3319                |
| GI       | none   | Score   | .46                 |
| Exons    | 1558..1751, 2119..2257, 2335..2427, 2527..2586, 2846..2988, 2999..3081, 3165..3319             |         |                     |
|          |  |         |                     |
| Seq. No. | 21935  | Seq. ID | OJ990105_06.9819.C4 |
| Gene No. | 45658  | Strand  | -                   |
| Start    | 217  | End     | 306                 |
| Name     | OJ990105_06.9819.C4.o1.gs  | Method  | GENSCAN             |
| Start    | 217  | End     | 306                 |
| GI       | none   | Score   | .49                 |
| Exons    | 217..306   |         |                     |
|          |  |         |                     |
| Seq. No. | 21936  | Seq. ID | OJ990105_06.9819.C5 |
| Gene No. | 45659  | Strand  | +                   |
| Start    | 565  | End     | 741                 |
| Name     | OJ990105_06.9819.C5.o1.gs  | Method  | GENSCAN             |
| Start    | 565  | End     | 741                 |
| GI       | none   | Score   | .93                 |
| Exons    | 565..741   |         |                     |
|          |  |         |                     |
| Seq. No. | 21936  | Seq. ID | OJ990105_06.9819.C5 |
| Gene No. | 45660  | Strand  | -                   |
| Start    | 2083   | End     | 4027                |
| Name     | OJ990105_06.9819.C5.o2.gs  | Method  | GENSCAN             |
| Start    | 2083   | End     | 4027                |
| GI       | none   | Score   | .72                 |
| Exons    | 2083..2309, 2342..2617, 3809..3919, 3964..4027   |         |                     |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21937   | Seq. ID | OJ990105_06.9819.C8  |
| Gene No.    | 45661   | Strand  | +                    |
| Start       | 46  | End     | 356                  |
| Name        | OJ990105_06.9819.C8.ol.tw   | Method  | TBLASTX:Wheat        |
| Start       | 29  | End     | 356                  |
| GI          | none  | Score   | 294                  |
| Exons       | 29..235, 29..241, 31..243, 240..356, 244..354   |         |                      |
|             |   |         |                      |
| Seq. No.    | 21937   | Seq. ID | OJ990105_06.9819.C8  |
| Gene No.    | 45661   | Strand  | +                    |
| Start       | 46  | End     | 356                  |
| Name        | OJ990105_06.9819.C8.ol.gs   | Method  | GENSCAN              |
| Start       | 46  | End     | 238                  |
| GI          | none  | Score   | .86                  |
| Exons       | 46..64, 81..238   |         |                      |
|             |   |         |                      |
| Seq. No.    | 21938   | Seq. ID | OJ990105_06.9819.C10 |
| Gene No.    | 45662   | Strand  | +                    |
| Start       | 1323  | End     | 1494                 |
| Name        | OJ990105_06.9819.C10.ol.np  | Method  | AAT/NAP              |
| Start       | 1323  | End     | 1494                 |
| GI          | 6063554   | Score   | 127                  |
| Exons       | 1323..1494  |         |                      |
| GI Descrip. | (AP000615) ESTs AU075609(C63344),C71850(E0464),C98611(E0464) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                      |
|             |   |         |                      |
| Seq. No.    | 21938   | Seq. ID | OJ990105_06.9819.C10 |
| Gene No.    | 45663   | Strand  | -                    |
| Start       | 658   | End     | 1941                 |
| Name        | OJ990105_06.9819.C10.ol.gs  | Method  | GENSCAN              |
| Start       | 658   | End     | 1941                 |
| GI          | none  | Score   | .62                  |
| Exons       | 658..767, 1226..1309, 1469..1622, 1862..1941  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21939   | Seq. ID | OJ990105_06.9819.C11 |
| Gene No.    | 45664   | Strand  | -                    |
| Start       | 750   | End     | 2375                 |
| Name        | OJ990105_06.9819.C11.ol.np  | Method  | AAT/NAP              |
| Start       | 750   | End     | 2375                 |
| GI          | 6539588   | Score   | 224                  |
| Exons       | 750..765, 2090..2375  |         |                      |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21940   | Seq. ID | OJ990105_06.9819.C12 |
| Gene No.    | 45665   | Strand  | +                    |
| Start       | 133   | End     | 323                  |
| Name        | OJ990105_06.9819.C12.ol.gs  | Method  | GENSCAN              |
| Start       | 133   | End     | 323                  |
| GI          | none  | Score   | .7                   |
| Exons       | 133..323  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21940   | Seq. ID | OJ990105_06.9819.C12 |
| Gene No.    | 45666   | Strand  | -                    |
| Start       | 364   | End     | 636                  |
| Name        | OJ990105_06.9819.C12.ol.gp  | Method  | AAT/GAP              |
| Start       | 364   | End     | 636                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| GI          | 2427384   | Score   | 476                  |
| Exons       | 364..636  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21941   | Seq. ID | OJ990105_06.9819.C14 |
| Gene No.    | 45667   | Strand  | +                    |
| Start       | 996   | End     | 2174                 |
| Name        | OJ990105_06.9819.C14.o1.gs  | Method  | GENSCAN              |
| Start       | 996   | End     | 2174                 |
| GI          | none  | Score   | .5                   |
| Exons       | 996..1013, 1765..1930, 1993..2174   |         |                      |
|             |   |         |                      |
| Seq. No.    | 21942   | Seq. ID | OJ990105_06.9819.C15 |
| Gene No.    | 45668   | Strand  | -                    |
| Start       | 1249  | End     | 4473                 |
| Name        | OJ990105_06.9819.C15.o1.np  | Method  | AAT/NAP              |
| Start       | 1242  | End     | 4473                 |
| GI          | 6815097   | Score   | 1730                 |
| Exons       | 1242..1483, 1625..3278, 3394..4473  |         |                      |
| GI Descrip. | (AP001081) Similar to putative copia polyprotein (AC006248) [Oryza sativa]          |         |                      |
|             |   |         |                      |
| Seq. No.    | 21942   | Seq. ID | OJ990105_06.9819.C15 |
| Gene No.    | 45668   | Strand  | -                    |
| Start       | 1249  | End     | 4473                 |
| Name        | OJ990105_06.9819.C15.o2.gs  | Method  | GENSCAN              |
| Start       | 1249  | End     | 3251                 |
| GI          | none  | Score   | .62                  |
| Exons       | 1249..1650, 1756..1848, 1983..3251  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21943   | Seq. ID | OJ990105_06.9819.C16 |
| Gene No.    | 45669   | Strand  | -                    |
| Start       | 1   | End     | 741                  |
| Name        | OJ990105_06.9819.C16.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 337                  |
| GI          | 1154954   | Score   | 283                  |
| Exons       | 1..337  |         |                      |
| GI Descrip. | (X94693) histone H2A [Triticum aestivum]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21943   | Seq. ID | OJ990105_06.9819.C16 |
| Gene No.    | 45669   | Strand  | -                    |
| Start       | 1   | End     | 741                  |
| Name        | OJ990105_06.9819.C16.o2.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 741                  |
| GI          | 6523547   | Score   | 169                  |
| Exons       | 1..20, 123..269, 392..741   |         |                      |
| GI Descrip. | (AJ242540) hydroxyproline-rich glycoprotein DZ-HRGP [Volvox carteri f. nagariensis] |         |                      |
|             |   |         |                      |
| Seq. No.    | 21943   | Seq. ID | OJ990105_06.9819.C16 |
| Gene No.    | 45669   | Strand  | -                    |
| Start       | 1   | End     | 741                  |
| Name        | OJ990105_06.9819.C16.o1.gs  | Method  | GENSCAN              |
| Start       | 80  | End     | 337                  |
| GI          | none  | Score   | .64                  |
| Exons       | 80..337   |         |                      |
|             |   |         |                      |
| Seq. No.    | 21944   | Seq. ID | OJ990105_06.9819.C17 |



|             |   |         |                      |
|-------------|---|---------|----------------------|
| Gene No.    | 45670   | Strand  | -                    |
| Start       | 1273  | End     | 1931                 |
| Name        | OJ990105_06.9819.C17.o1.gs  | Method  | GENSCAN              |
| Start       | 1273  | End     | 1931                 |
| GI          | none  | Score   | .71                  |
| Exons       | 1273..1344, 1818..1931  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21945   | Seq. ID | OJ990105_06.9819.C18 |
| Gene No.    | 45671   | Strand  | +                    |
| Start       | 826   | End     | 884                  |
| Name        | OJ990105_06.9819.C18.o1.gp  | Method  | AAT/GAP              |
| Start       | 826   | End     | 884                  |
| GI          | 77434_1.R1084   | Score   | 81                   |
| Exons       | 826..884  |         |                      |
| GI Descrip. | '2827528/emb CAA16536.1  2.0e-10 (AL021633) predicted protein [Arabidopsis thaliana]' |         |                      |
|             |   |         |                      |
| Seq. No.    | 21946   | Seq. ID | OJ990105_06.9819.C19 |
| Gene No.    | 45672   | Strand  | -                    |
| Start       | 766   | End     | 2110                 |
| Name        | OJ990105_06.9819.C19.o1.gs  | Method  | GENSCAN              |
| Start       | 766   | End     | 2107                 |
| GI          | none  | Score   | .74                  |
| Exons       | 766..973, 1394..1589, 1690..2107  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21946   | Seq. ID | OJ990105_06.9819.C19 |
| Gene No.    | 45672   | Strand  | -                    |
| Start       | 766   | End     | 2110                 |
| Name        | OJ990105_06.9819.C19.o1.np  | Method  | AAT/NAP              |
| Start       | 1676  | End     | 2110                 |
| GI          | 4680185   | Score   | 477                  |
| Exons       | 1676..2110  |         |                      |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica]                                       |         |                      |
|             |   |         |                      |
| Seq. No.    | 21946   | Seq. ID | OJ990105_06.9819.C19 |
| Gene No.    | 45673   | Strand  | -                    |
| Start       | 2992  | End     | 3204                 |
| Name        | OJ990105_06.9819.C19.o2.np  | Method  | AAT/NAP              |
| Start       | 2992  | End     | 3204                 |
| GI          | 4680186   | Score   | 111                  |
| Exons       | 2992..3204  |         |                      |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica]                                       |         |                      |
|             |   |         |                      |
| Seq. No.    | 21947   | Seq. ID | OJ990105_06.9819.C21 |
| Gene No.    | 45674   | Strand  | -                    |
| Start       | 493   | End     | 876                  |
| Name        | OJ990105_06.9819.C21.o1.tw  | Method  | TBLASTX:Wheat        |
| Start       | 388   | End     | 690                  |
| GI          | none  | Score   | 86                   |
| Exons       | 388..651, 397..690  |         |                      |
|             |   |         |                      |
| Seq. No.    | 21947   | Seq. ID | OJ990105_06.9819.C21 |
| Gene No.    | 45674   | Strand  | -                    |
| Start       | 493   | End     | 876                  |
| Name        | OJ990105_06.9819.C21.o1.gs  | Method  | GENSCAN              |
| Start       | 493   | End     | 876                  |
| GI          | none  | Score   | 1                    |

Exons 493..876

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 21948                            | Seq. ID | OJ990105_06.9819.C22 |
| Gene No. | 45675                            | Strand  | +                    |
| Start    | 723                              | End     | 1813                 |
| Name     | OJ990105_06.9819.C22.ol.gs       | Method  | GENSCAN              |
| Start    | 723                              | End     | 1592                 |
| GI       | none                             | Score   | .89                  |
| Exons    | 723..911, 1161..1244, 1401..1592 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21948   | Seq. ID | OJ990105_06.9819.C22 |
| Gene No.    | 45675   | Strand  | +                    |
| Start       | 723   | End     | 1813                 |
| Name        | OJ990105_06.9819.C22.ol.np  | Method  | AAT/NAP              |
| Start       | 782   | End     | 1813                 |
| GI          | 4544372   | Score   | 500                  |
| Exons       | 782..1813   |         |                      |
| GI Descrip. | (AC006920) putative retroelement pol polyprotein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21948                      | Seq. ID | OJ990105_06.9819.C22 |
| Gene No. | 45675                      | Strand  | +                    |
| Start    | 723                        | End     | 1813                 |
| Name     | OJ990105_06.9819.C22.ol.tm | Method  | TBLASTX:Maize        |
| Start    | 789                        | End     | 1142                 |
| GI       | none                       | Score   | 200                  |
| Exons    | 789..1142                  |         |                      |

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 21948                             | Seq. ID | OJ990105_06.9819.C22 |
| Gene No. | 45675                             | Strand  | +                    |
| Start    | 723                               | End     | 1813                 |
| Name     | OJ990105_06.9819.C22.ol.ts        | Method  | TBLASTX:Soybean      |
| Start    | 996                               | End     | 1391                 |
| GI       | none                              | Score   | 211                  |
| Exons    | 996..1391, 1071..1214, 1157..1291 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21949   | Seq. ID | OJ990105_06.9819.C23 |
| Gene No.    | 45676   | Strand  | -                    |
| Start       | 655   | End     | 781                  |
| Name        | OJ990105_06.9819.C23.ol.gp  | Method  | AAT/GAP              |
| Start       | 655   | End     | 781                  |
| GI          | 3761363   | Score   | 183                  |
| Exons       | 655..781  |         |                      |
| GI Descrip. | 5852170/emb AL117265.1 OST17804 1.0e-151 Oryza sativa indica (GLA4) genomic DNA, chromosome 4, BAC clone:tl7804 |         |                      |

|             |                                     |         |                      |
|-------------|-------------------------------------|---------|----------------------|
| Seq. No.    | 21949                               | Seq. ID | OJ990105_06.9819.C23 |
| Gene No.    | 45677                               | Strand  | -                    |
| Start       | 1495                                | End     | 2520                 |
| Name        | OJ990105_06.9819.C23.ol.np          | Method  | AAT/NAP              |
| Start       | 1465                                | End     | 2363                 |
| GI          | 5852178                             | Score   | 449                  |
| Exons       | 1465..1560, 1924..2026, 2058..2363  |         |                      |
| GI Descrip. | (AL117265) zhb0008.1 [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21949 | Seq. ID | OJ990105_06.9819.C23 |
| Gene No. | 45677 | Strand  | -                    |

|       |  |        |         |
|-------|--|--------|---------|
| Start | 1495   | End    | 2520    |
| Name  | OJ990105_06.9819.C23.o1.gs                     | Method | GENSCAN |
| Start | 1495   | End    | 2520    |
| GI    | none   | Score  | .82     |
| Exons | 1495..1559, 1906..2029, 2058..2310, 2315..2520 |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21950                      | Seq. ID | OJ990105_06.9819.C26 |
| Gene No. | 45678                      | Strand  | -                    |
| Start    | 87                         | End     | 464                  |
| Name     | OJ990105_06.9819.C26.o1.gs | Method  | GENSCAN              |
| Start    | 87                         | End     | 464                  |
| GI       | none                       | Score   | .44                  |
| Exons    | 87..206, 328..464          |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21951   | Seq. ID | OJ990105_06.9819.C27 |
| Gene No.    | 45679   | Strand  | +                    |
| Start       | 1   | End     | 1115                 |
| Name        | OJ990105_06.9819.C27.o2.np                              | Method  | AAT/NAP              |
| Start       | 1   | End     | 1115                 |
| GI          | 4680183   | Score   | 110                  |
| Exons       | 1..181, 1022..1115                                      |         |                      |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21951                      | Seq. ID | OJ990105_06.9819.C27 |
| Gene No. | 45680                      | Strand  | -                    |
| Start    | 692                        | End     | 993                  |
| Name     | OJ990105_06.9819.C27.o1.gs | Method  | GENSCAN              |
| Start    | 692                        | End     | 993                  |
| GI       | none                       | Score   | .95                  |
| Exons    | 692..831, 942..993         |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21951   | Seq. ID | OJ990105_06.9819.C27 |
| Gene No.    | 45681   | Strand  | -                    |
| Start       | 903   | End     | 993                  |
| Name        | OJ990105_06.9819.C27.o1.np  | Method  | AAT/NAP              |
| Start       | 903   | End     | 993                  |
| GI          | 6721561   | Score   | 137                  |
| Exons       | 903..993  |         |                      |
| GI Descrip. | (AP001073) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]<br>gi 6815086 dbj BAA90372.1  (AP001081) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21952  | Seq. ID | OJ990105_06.9819.C29 |
| Gene No.    | 45682  | Strand  | +                    |
| Start       | 1024   | End     | 1405                 |
| Name        | OJ990105_06.9819.C29.o1.gp   | Method  | AAT/GAP              |
| Start       | 1024   | End     | 1405                 |
| GI          | uC-osflcyp033a04b1   | Score   | 635                  |
| Exons       | 1024..1405   |         |                      |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21952 | Seq. ID | OJ990105_06.9819.C29 |
| Gene No. | 45683 | Strand  | -                    |
| Start    | 954   | End     | 2740                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990105_06.9819.C29.ol.gs   | Method  | GENSCAN              |
| Start       | 954  | End     | 1157                 |
| GI          | none   | Score   | .4                   |
| Exons       | 954..1157  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21952  | Seq. ID | OJ990105_06.9819.C29 |
| Gene No.    | 45683  | Strand  | -                    |
| Start       | 954  | End     | 2740                 |
| Name        | OJ990105_06.9819.C29.ol.np   | Method  | AAT/NAP              |
| Start       | 957  | End     | 2740                 |
| GI          | 4680186  | Score   | 354                  |
| Exons       | 957..1157, 1998..2049, 2695..2740  |         |                      |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica]                                  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21953  | Seq. ID | OJ990105_06.9819.C30 |
| Gene No.    | 45684  | Strand  | +                    |
| Start       | 226  | End     | 1491                 |
| Name        | OJ990105_06.9819.C30.ol.gs   | Method  | GENSCAN              |
| Start       | 226  | End     | 1491                 |
| GI          | none   | Score   | .55                  |
| Exons       | 226..351, 1325..1491   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21953  | Seq. ID | OJ990105_06.9819.C30 |
| Gene No.    | 45685  | Strand  | -                    |
| Start       | 75   | End     | 668                  |
| Name        | OJ990105_06.9819.C30.ol.np   | Method  | AAT/NAP              |
| Start       | 75   | End     | 668                  |
| GI          | 100484   | Score   | 234                  |
| Exons       | 75..668  |         |                      |
| GI Descrip. | hypothetical protein - garden snapdragon   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21954  | Seq. ID | OJ990105_06.9819.C31 |
| Gene No.    | 45686  | Strand  | -                    |
| Start       | 895  | End     | 1817                 |
| Name        | OJ990105_06.9819.C31.ol.gs   | Method  | GENSCAN              |
| Start       | 895  | End     | 1817                 |
| GI          | none   | Score   | .57                  |
| Exons       | 895..1023, 1749..1817  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21955  | Seq. ID | OJ990105_06.9819.C33 |
| Gene No.    | 45687  | Strand  | +                    |
| Start       | 174  | End     | 2173                 |
| Name        | OJ990105_06.9819.C33.ol.gs   | Method  | GENSCAN              |
| Start       | 174  | End     | 2173                 |
| GI          | none   | Score   | .74                  |
| Exons       | 174..259, 2045..2173   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21955  | Seq. ID | OJ990105_06.9819.C33 |
| Gene No.    | 45688  | Strand  | -                    |
| Start       | 3655   | End     | 4707                 |
| Name        | OJ990105_06.9819.C33.ol.np   | Method  | AAT/NAP              |
| Start       | 2781   | End     | 4707                 |
| GI          | 5295955  | Score   | 640                  |
| Exons       | 2781..3350, 3390..3456, 3536..3828, 3922..4044, 4678..4707                       |         |                      |
| GI Descrip. | (AB026295) Similar to Epstein-Barr virus (EBV) genome.(V01555)<br>[Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21955                      | Seq. ID | OJ990105_06.9819.C33 |
| Gene No. | 45688                      | Strand  | -                    |
| Start    | 3655                       | End     | 4707                 |
| Name     | OJ990105_06.9819.C33.o2.gs | Method  | GENSCAN              |
| Start    | 3655                       | End     | 4014                 |
| GI       | none                       | Score   | .82                  |
| Exons    | 3655..4014                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21956                      | Seq. ID | OJ990105_06.9819.C34 |
| Gene No. | 45689                      | Strand  | -                    |
| Start    | 671                        | End     | 698                  |
| Name     | OJ990105_06.9819.C34.o1.gs | Method  | GENSCAN              |
| Start    | 671                        | End     | 698                  |
| GI       | none                       | Score   | .51                  |
| Exons    | 671..698                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21956  | Seq. ID | OJ990105_06.9819.C34 |
| Gene No. | 45690  | Strand  |                      |
| Start    | 732  | End     | 1244                 |
| Name     | OJ990105_06.9819.C34.o1.tm                           | Method  | TBLASTX:Maize        |
| Start    | 732  | End     | 1244                 |
| GI       | none   | Score   | 73                   |
| Exons    | 732..824, 855..1085, 855..929, 984..1043, 1101..1244 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21956                      | Seq. ID | OJ990105_06.9819.C34 |
| Gene No. | 45690                      | Strand  |                      |
| Start    | 732                        | End     | 1244                 |
| Name     | OJ990105_06.9819.C34.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 834                        | End     | 1202                 |
| GI       | none                       | Score   | 179                  |
| Exons    | 834..1046, 1155..1202      |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21957  | Seq. ID | OJ990105_06.9819.C35 |
| Gene No. | 45691  | Strand  | +                    |
| Start    | 303  | End     | 3049                 |
| Name     | OJ990105_06.9819.C35.o1.gs                             | Method  | GENSCAN              |
| Start    | 303  | End     | 2686                 |
| GI       | none   | Score   | .45                  |
| Exons    | 303..314, 404..657, 1585..1996, 2199..2325, 2555..2686 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21957  | Seq. ID | OJ990105_06.9819.C35 |
| Gene No.    | 45691  | Strand  | +                    |
| Start       | 303  | End     | 3049                 |
| Name        | OJ990105_06.9819.C35.o1.np   | Method  | AAT/NAP              |
| Start       | 1664   | End     | 3049                 |
| GI          | 6815097  | Score   | 318                  |
| Exons       | 1664..2517, 3006..3049   |         |                      |
| GI Descrip. | (AP001081) Similar to putative copia polyprotein (AC006248) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21957                      | Seq. ID | OJ990105_06.9819.C35 |
| Gene No. | 45691                      | Strand  | +                    |
| Start    | 303                        | End     | 3049                 |
| Name     | OJ990105_06.9819.C35.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 1730                       | End     | 2002                 |
| GI       | none                       | Score   | 185                  |
| Exons    | 1730..2002                 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21958                              | Seq. ID | OJ990105_06.9819.C36 |
| Gene No. | 45692                              | Strand  | +                    |
| Start    | 1102                               | End     | 1850                 |
| Name     | OJ990105_06.9819.C36.o1.gs         | Method  | GENSCAN              |
| Start    | 1102                               | End     | 1850                 |
| GI       | none                               | Score   | .86                  |
| Exons    | 1102..1337, 1342..1597, 1737..1850 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21958   | Seq. ID | OJ990105_06.9819.C36 |
| Gene No.    | 45693   | Strand  | +                    |
| Start       | 3303  | End     | 3475                 |
| Name        | OJ990105_06.9819.C36.o1.gp  | Method  | AAT/GAP              |
| Start       | 3303  | End     | 3475                 |
| GI          | LIB3433-026-P1-K1-C1  | Score   | 258                  |
| Exons       | 3303..3475  |         |                      |
| GI Descrip. | '5852170/emb AL117265.1 OST17804 1.0e-44 Oryza sativa indica(GLA4) genomic DNA, chromosome 4, BAC clone:t17804' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21958  | Seq. ID | OJ990105_06.9819.C36 |
| Gene No.    | 45694  | Strand  | -                    |
| Start       | 132  | End     | 2669                 |
| Name        | OJ990105_06.9819.C36.o1.np                   | Method  | AAT/NAP              |
| Start       | 132  | End     | 2669                 |
| GI          | 5852179                                      | Score   | 248                  |
| Exons       | 132..554, 1353..1548, 1623..1823, 2649..2669 |         |                      |
| GI Descrip. | (AL117265) zhb0009.1 [Oryza sativa]          |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21958                      | Seq. ID | OJ990105_06.9819.C36 |
| Gene No. | 45695                      | Strand  | -                    |
| Start    | 6196                       | End     | 6396                 |
| Name     | OJ990105_06.9819.C36.o2.gs | Method  | GENSCAN              |
| Start    | 6196                       | End     | 6396                 |
| GI       | none                       | Score   | .42                  |
| Exons    | 6196..6396                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21959  | Seq. ID | OJ990105_06.9819.C38 |
| Gene No.    | 45696  | Strand  | -                    |
| Start       | 144  | End     | 1081                 |
| Name        | OJ990105_06.9819.C38.o1.np                     | Method  | AAT/NAP              |
| Start       | 144  | End     | 1081                 |
| GI          | 4680203  | Score   | 457                  |
| Exons       | 144..1081                                      |         |                      |
| GI Descrip. | (AF114171) TNP2-like protein [Sorghum bicolor] |         |                      |

|          |                               |         |                      |
|----------|-------------------------------|---------|----------------------|
| Seq. No. | 21959                         | Seq. ID | OJ990105_06.9819.C38 |
| Gene No. | 45696                         | Strand  | -                    |
| Start    | 144                           | End     | 1081                 |
| Name     | OJ990105_06.9819.C38.o1.gs    | Method  | GENSCAN              |
| Start    | 218                           | End     | 1038                 |
| GI       | none                          | Score   | .66                  |
| Exons    | 218..505, 611..795, 844..1038 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21959                      | Seq. ID | OJ990105_06.9819.C38 |
| Gene No. | 45696                      | Strand  | -                    |
| Start    | 144                        | End     | 1081                 |
| Name     | OJ990105_06.9819.C38.o1.tw | Method  | TBLASTX:Wheat        |

|       |  |       |      |
|-------|--|-------|------|
| Start | 293  | End   | 1069 |
| GI    | none   | Score | 67   |
| Exons | 293..361, 368..472, 375..467, 485..589, 486..590, 578..772, 612..740, 788..1069, 972..1028 |       |      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21959                                  | Seq. ID | OJ990105_06.9819.C38 |
| Gene No. | 45696                                  | Strand  | -                    |
| Start    | 144                                    | End     | 1081                 |
| Name     | OJ990105_06.9819.C38.o1.tm             | Method  | TBLASTX:Maize        |
| Start    | 602                                    | End     | 892                  |
| GI       | none                                   | Score   | 72                   |
| Exons    | 602..718, 603..710, 722..892, 731..883 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21960   | Seq. ID | OJ990105_06.9819.C40 |
| Gene No.    | 45697   | Strand  | +                    |
| Start       | 1   | End     | 1726                 |
| Name        | OJ990105_06.9819.C40.o2.np                              | Method  | AAT/NAP              |
| Start       | 1   | End     | 1726                 |
| GI          | 4680183   | Score   | 125                  |
| Exons       | 1..49, 1637..1726                                       |         |                      |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21960   | Seq. ID | OJ990105_06.9819.C40 |
| Gene No.    | 45698   | Strand  | -                    |
| Start       | 1   | End     | 1604                 |
| Name        | OJ990105_06.9819.C40.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1604                 |
| GI          | 6721561   | Score   | 143                  |
| Exons       | 1..38, 1514..1604   |         |                      |
| GI Descrip. | (AP001073) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]<br>gi 6815086 dbj BAA90372.1  (AP001081) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21960                      | Seq. ID | OJ990105_06.9819.C40 |
| Gene No. | 45698                      | Strand  | -                    |
| Start    | 1                          | End     | 1604                 |
| Name     | OJ990105_06.9819.C40.o1.gs | Method  | GENSCAN              |
| Start    | 1303                       | End     | 1604                 |
| GI       | none                       | Score   | .95                  |
| Exons    | 1303..1442, 1553..1604     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21961                      | Seq. ID | OJ990105_06.9819.C41 |
| Gene No. | 45699                      | Strand  | +                    |
| Start    | 1888                       | End     | 2001                 |
| Name     | OJ990105_06.9819.C41.o1.gs | Method  | GENSCAN              |
| Start    | 1888                       | End     | 2001                 |
| GI       | none                       | Score   | .52                  |
| Exons    | 1888..2001                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21962                      | Seq. ID | OJ990105_06.9819.C43 |
| Gene No. | 45700                      | Strand  | +                    |
| Start    | 317                        | End     | 608                  |
| Name     | OJ990105_06.9819.C43.o1.gs | Method  | GENSCAN              |
| Start    | 317                        | End     | 608                  |
| GI       | none                       | Score   | .8                   |

Exons 317..435, 495..608

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21963                      | Seq. ID | OJ990105_06.9819.C44 |
| Gene No. | 45701                      | Strand  | -                    |
| Start    | 1585                       | End     | 1832                 |
| Name     | OJ990105_06.9819.C44.o1.gs | Method  | GENSCAN              |
| Start    | 1585                       | End     | 1832                 |
| GI       | none                       | Score   | .68                  |
| Exons    | 1585..1653, 1725..1832     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21964                      | Seq. ID | OJ990105_06.9819.C45 |
| Gene No. | 45702                      | Strand  | +                    |
| Start    | 59                         | End     | 221                  |
| Name     | OJ990105_06.9819.C45.o1.gs | Method  | GENSCAN              |
| Start    | 59                         | End     | 221                  |
| GI       | none                       | Score   | .54                  |
| Exons    | 59..221                    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21965                      | Seq. ID | OJ990105_06.9819.C46 |
| Gene No. | 45703                      | Strand  | +                    |
| Start    | 429                        | End     | 1183                 |
| Name     | OJ990105_06.9819.C46.o1.gs | Method  | GENSCAN              |
| Start    | 429                        | End     | 1183                 |
| GI       | none                       | Score   | .89                  |
| Exons    | 429..597, 930..1183        |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21966                      | Seq. ID | OJ990105_06.9819.C48 |
| Gene No. | 45704                      | Strand  | +                    |
| Start    | 671                        | End     | 1112                 |
| Name     | OJ990105_06.9819.C48.o1.gs | Method  | GENSCAN              |
| Start    | 671                        | End     | 1112                 |
| GI       | none                       | Score   | .98                  |
| Exons    | 671..755, 871..1112        |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21966  | Seq. ID | OJ990105_06.9819.C48 |
| Gene No. | 45705  | Strand  | -                    |
| Start    | 2762   | End     | 3839                 |
| Name     | OJ990105_06.9819.C48.o2.gs                     | Method  | GENSCAN              |
| Start    | 2762   | End     | 3839                 |
| GI       | none   | Score   | .83                  |
| Exons    | 2762..2970, 2996..3096, 3542..3570, 3645..3839 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21967                      | Seq. ID | OJ990105_06.9819.C51 |
| Gene No. | 45706                      | Strand  | +                    |
| Start    | 61                         | End     | 899                  |
| Name     | OJ990105_06.9819.C51.o1.gs | Method  | GENSCAN              |
| Start    | 61                         | End     | 899                  |
| GI       | none                       | Score   | .57                  |
| Exons    | 61..151, 705..899          |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21968                      | Seq. ID | OJ990105_06.9819.C55 |
| Gene No. | 45707                      | Strand  | -                    |
| Start    | 1                          | End     | 594                  |
| Name     | OJ990105_06.9819.C55.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 468                  |
| GI       | 6498441                    | Score   | 218                  |
| Exons    | 1..468                     |         |                      |



GI Descrip. (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21968                      | Seq. ID | OJ990105_06.9819.C55 |
| Gene No. | 45707                      | Strand  | -                    |
| Start    | 1                          | End     | 594                  |
| Name     | OJ990105_06.9819.C55.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 1                          | End     | 180                  |
| GI       | none                       | Score   | 162                  |
| Exons    | 1..180, 2..178             |         |                      |

|          |                                |         |                      |
|----------|--------------------------------|---------|----------------------|
| Seq. No. | 21968                          | Seq. ID | OJ990105_06.9819.C55 |
| Gene No. | 45707                          | Strand  | -                    |
| Start    | 1                              | End     | 594                  |
| Name     | OJ990105_06.9819.C55.o1.tw     | Method  | TBLASTX:Wheat        |
| Start    | 2                              | End     | 240                  |
| GI       | none                           | Score   | 119                  |
| Exons    | 2..232, 4..111, 4..240, 5..223 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21968                      | Seq. ID | OJ990105_06.9819.C55 |
| Gene No. | 45707                      | Strand  | -                    |
| Start    | 1                          | End     | 594                  |
| Name     | OJ990105_06.9819.C55.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 34                         | End     | 402                  |
| GI       | none                       | Score   | 145                  |
| Exons    | 34..168, 184..402          |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21968                      | Seq. ID | OJ990105_06.9819.C55 |
| Gene No. | 45707                      | Strand  | -                    |
| Start    | 1                          | End     | 594                  |
| Name     | OJ990105_06.9819.C55.o1.gs | Method  | GENSCAN              |
| Start    | 280                        | End     | 594                  |
| GI       | none                       | Score   | .88                  |
| Exons    | 280..594                   |         |                      |

|          |                                |         |                      |
|----------|--------------------------------|---------|----------------------|
| Seq. No. | 21969                          | Seq. ID | OJ990105_06.9819.C56 |
| Gene No. | 45708                          | Strand  | -                    |
| Start    | 875                            | End     | 1167                 |
| Name     | OJ990105_06.9819.C56.o1.ts     | Method  | TBLASTX:Soybean      |
| Start    | 796                            | End     | 1153                 |
| GI       | none                           | Score   | 110                  |
| Exons    | 796..942, 943..1149, 983..1153 |         |                      |

|          |                                |         |                      |
|----------|--------------------------------|---------|----------------------|
| Seq. No. | 21969                          | Seq. ID | OJ990105_06.9819.C56 |
| Gene No. | 45708                          | Strand  | -                    |
| Start    | 875                            | End     | 1167                 |
| Name     | OJ990105_06.9819.C56.o1.tw     | Method  | TBLASTX:Wheat        |
| Start    | 796                            | End     | 1126                 |
| GI       | none                           | Score   | 74                   |
| Exons    | 796..942, 976..1122, 986..1126 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21969                      | Seq. ID | OJ990105_06.9819.C56 |
| Gene No. | 45708                      | Strand  | -                    |
| Start    | 875                        | End     | 1167                 |
| Name     | OJ990105_06.9819.C56.o1.gs | Method  | GENSCAN              |
| Start    | 875                        | End     | 1167                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| GI          | none   | Score   | .72                  |
| Exons       | 875..971, 1014..1167   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21969  | Seq. ID | OJ990105_06.9819.C56 |
| Gene No.    | 45708  | Strand  | -                    |
| Start       | 875  | End     | 1167                 |
| Name        | OJ990105_06.9819.C56.ol.tm   | Method  | TBLASTX:Maize        |
| Start       | 913  | End     | 1153                 |
| GI          | none   | Score   | 222                  |
| Exons       | 913..1146, 914..1153   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21970  | Seq. ID | OJ990105_06.9819.C57 |
| Gene No.    | 45709  | Strand  | +                    |
| Start       | 68   | End     | 891                  |
| Name        | OJ990105_06.9819.C57.ol.gs   | Method  | GENSCAN              |
| Start       | 68   | End     | 533                  |
| GI          | none   | Score   | .85                  |
| Exons       | 68..137, 221..533  |         |                      |
|             |  |         |                      |
| Seq. No.    | 21970  | Seq. ID | OJ990105_06.9819.C57 |
| Gene No.    | 45709  | Strand  | +                    |
| Start       | 68   | End     | 891                  |
| Name        | OJ990105_06.9819.C57.ol.np   | Method  | AAT/NAP              |
| Start       | 205  | End     | 891                  |
| GI          | 137937   | Score   | 597                  |
| Exons       | 205..891   |         |                      |
| GI Descrip. | REPLICATION PROTEIN 14 gi 14808 emb CAA31475  (X13065) gene 14 (AA 1 - 229) [Bacteriophage phi-80] |         |                      |
|             |  |         |                      |
| Seq. No.    | 21971  | Seq. ID | OJ990105_06.9819.C59 |
| Gene No.    | 45710  | Strand  | +                    |
| Start       | 1231   | End     | 2817                 |
| Name        | OJ990105_06.9819.C59.ol.np   | Method  | AAT/NAP              |
| Start       | 1231   | End     | 2817                 |
| GI          | 4836944  | Score   | 221                  |
| Exons       | 1231..1394, 1478..1684, 1782..1834, 2645..2817   |         |                      |
| GI Descrip. | (AC006085) Hypothetical protein [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21971  | Seq. ID | OJ990105_06.9819.C59 |
| Gene No.    | 45710  | Strand  | +                    |
| Start       | 1231   | End     | 2817                 |
| Name        | OJ990105_06.9819.C59.ol.tm   | Method  | TBLASTX:Maize        |
| Start       | 1269   | End     | 1843                 |
| GI          | none   | Score   | 64                   |
| Exons       | 1269..1316, 1289..1387, 1290..1388, 1310..1390, 1493..1684, 1495..1683, 1781..1843, 1782..1832     |         |                      |
|             |  |         |                      |
| Seq. No.    | 21971  | Seq. ID | OJ990105_06.9819.C59 |
| Gene No.    | 45710  | Strand  | +                    |
| Start       | 1231   | End     | 2817                 |
| Name        | OJ990105_06.9819.C59.ol.ts   | Method  | TBLASTX:Soybean      |
| Start       | 1269   | End     | 1832                 |
| GI          | none   | Score   | 60                   |
| Exons       | 1269..1370, 1269..1388, 1493..1684, 1504..1683, 1782..1832   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21971  | Seq. ID | OJ990105_06.9819.C59 |
| Gene No.    | 45710  | Strand  | +                    |

|       |                                    |        |         |
|-------|------------------------------------|--------|---------|
| Start | 1231                               | End    | 2817    |
| Name  | OJ990105_06.9819.C59.ol.gs         | Method | GENSCAN |
| Start | 1335                               | End    | 1868    |
| GI    | none                               | Score  | .83     |
| Exons | 1335..1394, 1496..1684, 1782..1868 |        |         |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21972  | Seq. ID | OJ990105_06.9819.C63 |
| Gene No.    | 45711  | Strand  | +                    |
| Start       | 1283   | End     | 2126                 |
| Name        | OJ990105_06.9819.C63.ol.np                     | Method  | AAT/NAP              |
| Start       | 1283   | End     | 2126                 |
| GI          | 6539588  | Score   | 71                   |
| Exons       | 1283..1414, 2046..2126                         |         |                      |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21972                      | Seq. ID | OJ990105_06.9819.C63 |
| Gene No. | 45712                      | Strand  | -                    |
| Start    | 879                        | End     | 938                  |
| Name     | OJ990105_06.9819.C63.ol.gs | Method  | GENSCAN              |
| Start    | 879                        | End     | 938                  |
| GI       | none                       | Score   | .56                  |
| Exons    | 879..938                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21973                      | Seq. ID | OJ990105_06.9819.C65 |
| Gene No. | 45713                      | Strand  | +                    |
| Start    | 165                        | End     | 514                  |
| Name     | OJ990105_06.9819.C65.ol.gp | Method  | AAT/GAP              |
| Start    | 165                        | End     | 343                  |
| GI       | none                       | Score   | 147                  |
| Exons    | 165..220, 306..343         |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 21973                        | Seq. ID | OJ990105_06.9819.C65 |
| Gene No. | 45713                        | Strand  | +                    |
| Start    | 165                          | End     | 514                  |
| Name     | OJ990105_06.9819.C65.ol.gs   | Method  | GENSCAN              |
| Start    | 197                          | End     | 514                  |
| GI       | none                         | Score   | .92                  |
| Exons    | 197..220, 306..343, 454..514 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21974   | Seq. ID | OJ990105_06.9819.C66 |
| Gene No.    | 45714   | Strand  | +                    |
| Start       | 1   | End     | 80                   |
| Name        | OJ990105_06.9819.C66.ol.gp  | Method  | AAT/GAP              |
| Start       | 1   | End     | 80                   |
| GI          | 77434_1.R1084   | Score   | 98                   |
| Exons       | 1..80   |         |                      |
| GI Descrip. | '2827528/emb CAA16536.1  2.0e-10 (AL021633) predicted protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21975  | Seq. ID | OJ990105_06.9819.C68 |
| Gene No. | 45715  | Strand  | +                    |
| Start    | 793  | End     | 1057                 |
| Name     | OJ990105_06.9819.C68.ol.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 503  | End     | 853                  |
| GI       | none   | Score   | 74                   |
| Exons    | 503..619, 518..619, 593..649, 605..850, 612..851, 713..853 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21975                                   | Seq. ID | OJ990105_06.9819.C68 |
| Gene No. | 45715                                   | Strand  | +                    |
| Start    | 793                                     | End     | 1057                 |
| Name     | OJ990105_06.9819.C68.o1.ts              | Method  | TBLASTX:Soybean      |
| Start    | 542                                     | End     | 1010                 |
| GI       | none                                    | Score   | 46                   |
| Exons    | 542..619, 608..835, 612..821, 822..1010 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21975                      | Seq. ID | OJ990105_06.9819.C68 |
| Gene No. | 45715                      | Strand  | +                    |
| Start    | 793                        | End     | 1057                 |
| Name     | OJ990105_06.9819.C68.o1.gs | Method  | GENSCAN              |
| Start    | 793                        | End     | 1057                 |
| GI       | none                       | Score   | .68                  |
| Exons    | 793..1057                  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21976                                      | Seq. ID | OJ990105_06.9819.C71 |
| Gene No. | 45716                                      | Strand  | +                    |
| Start    | 509  | End     | 3870                 |
| Name     | OJ990105_06.9819.C71.o1.gs                 | Method  | GENSCAN              |
| Start    | 509  | End     | 3870                 |
| GI       | none                                       | Score   | .7                   |
| Exons    | 509..592, 875..963, 2643..2913, 3100..3870 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21976  | Seq. ID | OJ990105_06.9819.C71 |
| Gene No. | 45716  | Strand  | +                    |
| Start    | 509  | End     | 3870                 |
| Name     | OJ990105_06.9819.C71.o1.tm                     | Method  | TBLASTX:Maize        |
| Start    | 2998   | End     | 3366                 |
| GI       | none   | Score   | 148                  |
| Exons    | 2998..3123, 3015..3122, 3148..3366, 3153..3266 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21977                      | Seq. ID | OJ990105_06.9819.C72 |
| Gene No. | 45717                      | Strand  | +                    |
| Start    | 1                          | End     | 581                  |
| Name     | OJ990105_06.9819.C72.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 331                  |
| GI       | 6630696                    | Score   | 436                  |
| Exons    | 1..331                     |         |                      |

GI Descrip. (AP000969) ESTs D22114(C10364), AU076106(E20423) correspond to a region of the predicted gene.; Similar to retrovirus-related pol polyprotein from transposon Tnt 1-94. (P10978) [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21977                      | Seq. ID | OJ990105_06.9819.C72 |
| Gene No. | 45717                      | Strand  | +                    |
| Start    | 1                          | End     | 581                  |
| Name     | OJ990105_06.9819.C72.o1.gs | Method  | GENSCAN              |
| Start    | 59                         | End     | 581                  |
| GI       | none                       | Score   | .4                   |
| Exons    | 59..168, 479..581          |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21977                      | Seq. ID | OJ990105_06.9819.C72 |
| Gene No. | 45718                      | Strand  | -                    |
| Start    | 2340                       | End     | 4611                 |
| Name     | OJ990105_06.9819.C72.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 30                         | End     | 195                  |
| GI       | none                       | Score   | 57                   |

Exons 30..119, 31..195, 32..193, 58..195

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21977  | Seq. ID | OJ990105_06.9819.C72 |
| Gene No. | 45718  | Strand  | -                    |
| Start    | 2340   | End     | 4611                 |
| Name     | OJ990105_06.9819.C72.o2.tm                       | Method  | TBLASTX:Maize        |
| Start    | 205  | End     | 444                  |
| GI       | none   | Score   | 112                  |
| Exons    | 205..294, 206..295, 207..296, 334..444, 345..443 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21977                      | Seq. ID | OJ990105_06.9819.C72 |
| Gene No. | 45718                      | Strand  | -                    |
| Start    | 2340                       | End     | 4611                 |
| Name     | OJ990105_06.9819.C72.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 2334                       | End     | 2567                 |
| GI       | none                       | Score   | 161                  |
| Exons    | 2334..2567, 2353..2523     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 21977                              | Seq. ID | OJ990105_06.9819.C72 |
| Gene No. | 45718                              | Strand  | -                    |
| Start    | 2340                               | End     | 4611                 |
| Name     | OJ990105_06.9819.C72.o1.tm         | Method  | TBLASTX:Maize        |
| Start    | 2340                               | End     | 2543                 |
| GI       | none                               | Score   | 87                   |
| Exons    | 2340..2543, 2343..2441, 2353..2526 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21977  | Seq. ID | OJ990105_06.9819.C72 |
| Gene No. | 45718  | Strand  | -                    |
| Start    | 2340   | End     | 4611                 |
| Name     | OJ990105_06.9819.C72.o2.gs   | Method  | GENSCAN              |
| Start    | 2340   | End     | 4611                 |
| GI       | none   | Score   | .4                   |
| Exons    | 2340..2553, 2756..2783, 3644..3913, 3918..4092, 4187..4227, 4233..4611 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21977                      | Seq. ID | OJ990105_06.9819.C72 |
| Gene No. | 45718                      | Strand  | -                    |
| Start    | 2340                       | End     | 4611                 |
| Name     | OJ990105_06.9819.C72.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 2340                       | End     | 2526                 |
| GI       | none                       | Score   | 181                  |
| Exons    | 2340..2525, 2353..2526     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21977                      | Seq. ID | OJ990105_06.9819.C72 |
| Gene No. | 45718                      | Strand  | -                    |
| Start    | 2340                       | End     | 4611                 |
| Name     | OJ990105_06.9819.C72.o2.np | Method  | AAT/NAP              |
| Start    | 2343                       | End     | 2561                 |
| GI       | 2118425                    | Score   | 243                  |
| Exons    | 2343..2561                 |         |                      |

GI Descrip. subtilisin/chymotrypsin inhibitor - maize  
gi|475253|emb|CAA55588| (X78988) proteinase inhibitor [Zea mays]  
gi|475922|emb|CAA49593| (X69972) proteinase inhibitor [Zea mays]  
gi|559538|emb|CAA57677| (X82187) substilin /chymotrypsin-like  
inhibitor [Zea mays]

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21978 | Seq. ID | OJ990105_06.9819.C73 |
|----------|-------|---------|----------------------|

Gene No. 45719 Strand -  
 Start 359 End 465  
 Name OJ990105\_06.9819.C73.o1.gp Method AAT/GAP  
 Start 359 End 465  
 GI LIB3433-057-P1-K1-C7 Score 155  
 Exons 359..465  
 GI Descrip. '531829 2.0e-12 (U12390) beta-galactosidase alpha peptide  
 [cloning vector pSport1]'

Seq. No. 21979 Seq. ID OJ990105\_07.9819.C1  
 Gene No. 45720 Strand +  
 Start 1 End 953  
 Name OJ990105\_07.9819.C1.o1.np Method AAT/NAP  
 Start 1 End 953  
 GI 4126473 Score 92  
 Exons 1..59, 869..953  
 GI Descrip. (AB014884) adenylyl cyclase associated protein [Gossypium  
 hirsutum]

Seq. No. 21979 Seq. ID OJ990105\_07.9819.C1  
 Gene No. 45721 Strand +  
 Start 870 End 1132  
 Name OJ990105\_07.9819.C1.o1.gp Method AAT/GAP  
 Start 870 End 1132  
 GI uC-osflcyp161g03a1 Score 461  
 Exons 870..1132  
 GI Descrip. '4126473/dbj|BAA36585| 1.0e-08 (AB014884) adenylyl cyclase  
 associated protein [Gossypium hirsutum]'

Seq. No. 21980 Seq. ID OJ990105\_07.9819.C4  
 Gene No. 45722 Strand -  
 Start 1089 End 1958  
 Name OJ990105\_07.9819.C4.o1.gs Method GENSCAN  
 Start 1089 End 1958  
 GI none Score .7  
 Exons 1089..1109, 1769..1958

Seq. No. 21981 Seq. ID OJ990105\_07.9819.C7  
 Gene No. 45723 Strand +  
 Start 851 End 1091  
 Name OJ990105\_07.9819.C7.o1.gp Method AAT/GAP  
 Start 851 End 1091  
 GI 12659 1.R1084 Score 233  
 Exons 851..907, 992..1091  
 GI Descrip. '3540182 3.0e-12 (AC004122) Unknown protein [Arabidopsis  
 thaliana]'

Seq. No. 21982 Seq. ID OJ990105\_07.9819.C8  
 Gene No. 45724 Strand +  
 Start 914 End 1081  
 Name OJ990105\_07.9819.C8.o1.gs Method GENSCAN  
 Start 914 End 1081  
 GI none Score .76  
 Exons 914..1081

Seq. No. 21983 Seq. ID OJ990105\_07.9819.C12  
 Gene No. 45725 Strand -

Start 232  
 Name OJ990105\_07.9819.C12.o1.gs  
 Start 232  
 GI none  
 Exons 232..297, 1542..1646

End 1646  
 Method GENSCAN  
 End 1646  
 Score .57

Seq. No. 21984  
 Gene No. 45726  
 Start 799  
 Name OJ990105\_07.9819.C13.o1.gs  
 Start 799  
 GI none  
 Exons 799..862

Seq. ID OJ990105\_07.9819.C13  
 Strand -  
 End 862  
 Method GENSCAN  
 End 862  
 Score .55

Seq. No. 21985  
 Gene No. 45727  
 Start 777  
 Name OJ990105\_07.9819.C14.o2.gp  
 Start 777  
 GI 32234\_1.R1084  
 Exons 777..1064

Seq. ID OJ990105\_07.9819.C14  
 Strand +  
 End 1064  
 Method AAT/GAP  
 End 1064  
 Score 504

GI Descrip. '5670155/gb|AF161269.1|AF161269 4.0e-86 Oryza sativa subsp. japonica BAC clone 34K24, complete sequence'

Seq. No. 21985  
 Gene No. 45727  
 Start 777  
 Name OJ990105\_07.9819.C14.o1.gs  
 Start 785  
 GI none  
 Exons 785..1000

Seq. ID OJ990105\_07.9819.C14  
 Strand +  
 End 1064  
 Method GENSCAN  
 End 1000  
 Score .54

Seq. No. 21985  
 Gene No. 45728  
 Start 569  
 Name OJ990105\_07.9819.C14.o1.gp  
 Start 569  
 GI LIB3432-059-P1-K1-D8  
 Exons 569..724

Seq. ID OJ990105\_07.9819.C14  
 Strand -  
 End 724  
 Method AAT/GAP  
 End 724  
 Score 258

GI Descrip. '5734616/dbj|AP000391.1|AP000391 0.0e+00 Oryza sativa genomic DNA, chromosome 6, clone:P0538C01'

Seq. No. 21986  
 Gene No. 45729  
 Start 874  
 Name OJ990105\_07.9819.C15.o1.tm  
 Start 874  
 GI none  
 Exons 874..1002, 878..973, 884..1003, 886..1002, 888..1004

Seq. ID OJ990105\_07.9819.C15  
 Strand  
 End 1026  
 Method TBLASTX:Maize  
 End 1004  
 Score 138

Seq. No. 21986  
 Gene No. 45729  
 Start 874  
 Name OJ990105\_07.9819.C15.o1.tc  
 Start 880  
 GI none  
 Exons 880..1017, 881..973, 889..1026, 891..1022

Seq. ID OJ990105\_07.9819.C15  
 Strand  
 End 1026  
 Method TBLASTX:Cress  
 End 1026  
 Score 77

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21987  | Seq. ID | OJ990105_07.9819.C16 |
| Gene No.    | 45730  | Strand  | +                    |
| Start       | 854  | End     | 935                  |
| Name        | OJ990105_07.9819.C16.o1.gp   | Method  | AAT/GAP              |
| Start       | 854  | End     | 935                  |
| GI          | none   | Score   | 79                   |
| Exons       | 854..935   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21988  | Seq. ID | OJ990105_07.9819.C19 |
| Gene No.    | 45731  | Strand  | +                    |
| Start       | 1148   | End     | 1255                 |
| Name        | OJ990105_07.9819.C19.o1.gp   | Method  | AAT/GAP              |
| Start       | 1148   | End     | 1255                 |
| GI          | LIB3477-003-P1-K1-E9   | Score   | 156                  |
| Exons       | 1148..1255   |         |                      |
| GI Descrip. | '2498586/sp Q40638 MPO1_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY S 1 PRECURSOR (ORY S I) >gi_1173557 (U31771) Ory s 1 [Oryza sativa]' |         |                      |
|             |  |         |                      |
| Seq. No.    | 21989  | Seq. ID | OJ990105_07.9819.C20 |
| Gene No.    | 45732  | Strand  | +                    |
| Start       | 303  | End     | 503                  |
| Name        | OJ990105_07.9819.C20.o1.gs   | Method  | GENSCAN              |
| Start       | 303  | End     | 503                  |
| GI          | none   | Score   | .69                  |
| Exons       | 303..503   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21989  | Seq. ID | OJ990105_07.9819.C20 |
| Gene No.    | 45733  | Strand  | +                    |
| Start       | 2673   | End     | 5394                 |
| Name        | OJ990105_07.9819.C20.o2.gs   | Method  | GENSCAN              |
| Start       | 2673   | End     | 5394                 |
| GI          | none   | Score   | .91                  |
| Exons       | 2673..2741, 2758..3629, 3744..3798, 4144..5394   |         |                      |
|             |  |         |                      |
| Seq. No.    | 21989  | Seq. ID | OJ990105_07.9819.C20 |
| Gene No.    | 45734  | Strand  | +                    |
| Start       | 10012  | End     | 10115                |
| Name        | OJ990105_07.9819.C20.o1.gp   | Method  | AAT/GAP              |
| Start       | 10012  | End     | 10115                |
| GI          | LIB3477-003-P1-K1-E9   | Score   | 138                  |
| Exons       | 10012..10115   |         |                      |
| GI Descrip. | '2498586/sp Q40638 MPO1_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY S 1 PRECURSOR (ORY S I) >gi_1173557 (U31771) Ory s 1 [Oryza sativa]' |         |                      |
|             |  |         |                      |
| Seq. No.    | 21989  | Seq. ID | OJ990105_07.9819.C20 |
| Gene No.    | 45735  | Strand  | +                    |
| Start       | 10115  | End     | 10570                |
| Name        | OJ990105_07.9819.C20.o2.gp   | Method  | AAT/GAP              |
| Start       | 10115  | End     | 10570                |
| GI          | LIB3432-059-P1-K1-D8   | Score   | 731                  |
| Exons       | 10115..10570   |         |                      |
| GI Descrip. | '5734616/dbj AP000391.1 AP000391 0.0e+00 Oryza sativa genomic DNA, chromosome 6, clone:P0538C01'                                     |         |                      |



|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21989  | Seq. ID | OJ990105_07.9819.C20 |
| Gene No. | 45736  | Strand  | -                    |
| Start    | 6008   | End     | 12989                |
| Name     | OJ990105_07.9819.C20.o3.gs   | Method  | GENSCAN              |
| Start    | 6008   | End     | 12989                |
| GI       | none   | Score   | .48                  |
| Exons    | 6008..6085, 6130..6270, 11187..11341, 11571..11733, 11974..12072, 12737..12936, 12974..12989 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21990                      | Seq. ID | OJ990105_07.9819.C21 |
| Gene No. | 45737                      | Strand  | +                    |
| Start    | 1199                       | End     | 2342                 |
| Name     | OJ990105_07.9819.C21.o1.gs | Method  | GENSCAN              |
| Start    | 1199                       | End     | 1866                 |
| GI       | none                       | Score   | .45                  |
| Exons    | 1199..1866                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21990  | Seq. ID | OJ990105_07.9819.C21 |
| Gene No.    | 45737  | Strand  | +                    |
| Start       | 1199   | End     | 2342                 |
| Name        | OJ990105_07.9819.C21.o1.np   | Method  | AAT/NAP              |
| Start       | 1652   | End     | 2342                 |
| GI          | 5441880  | Score   | 813                  |
| Exons       | 1652..2342   |         |                      |
| GI Descrip. | (AP000367). EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21991                      | Seq. ID | OJ990105_07.9819.C22 |
| Gene No. | 45738                      | Strand  | +                    |
| Start    | 680                        | End     | 1532                 |
| Name     | OJ990105_07.9819.C22.o1.gs | Method  | GENSCAN              |
| Start    | 680                        | End     | 1532                 |
| GI       | none                       | Score   | .57                  |
| Exons    | 680..845, 1191..1532       |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21992  | Seq. ID | OJ990105_07.9819.C23 |
| Gene No.    | 45739  | Strand  | +                    |
| Start       | 2302   | End     | 3547                 |
| Name        | OJ990105_07.9819.C23.o1.np                     | Method  | AAT/NAP              |
| Start       | 2302   | End     | 3547                 |
| GI          | 6721543  | Score   | 120                  |
| Exons       | 2302..2430, 3518..3547                         |         |                      |
| GI Descrip. | (AP001073) hypothetical protein [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21992   | Seq. ID | OJ990105_07.9819.C23 |
| Gene No.    | 45740   | Strand  | -                    |
| Start       | 2940  | End     | 5072                 |
| Name        | OJ990105_07.9819.C23.o1.gp  | Method  | AAT/GAP              |
| Start       | 2662  | End     | 3115                 |
| GI          | LIB3431-045-P1-N1-A10   | Score   | .872                 |
| Exons       | 2662..3115  |         |                      |
| GI Descrip. | '5441876/dbj AP000367.1 AP000367 0.0e+00 Oryza sativa genomic DNA, chromosome 2, clone:P0437H03 (contig b)' |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21992 | Seq. ID | OJ990105_07.9819.C23 |
| Gene No. | 45740 | Strand  | -                    |

|       |  |        |         |
|-------|--|--------|---------|
| Start | 2940   | End    | 5072    |
| Name  | OJ990105_07.9819.C23.o1.gs   | Method | GENSCAN |
| Start | 2940   | End    | 4961    |
| GI    | none   | Score  | .55     |
| Exons | 2940..3100, 3236..3453, 3458..3505, 3569..3700, 3819..3924, 3956..4076, 4812..4961 |        |         |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21992   | Seq. ID | OJ990105_07.9819.C23 |
| Gene No.    | 45740   | Strand  | -                    |
| Start       | 2940  | End     | 5072                 |
| Name        | OJ990105_07.9819.C23.o2.np  | Method  | AAT/NAP              |
| Start       | 3219  | End     | 5072                 |
| GI          | 5441880   | Score   | 652                  |
| Exons       | 3219..3453, 3569..3700, 3791..3814, 3851..3924, 5025..5072  |         |                      |
| GI Descrip. | (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21993   | Seq. ID | OJ990105_07.9819.C24 |
| Gene No.    | 45741   | Strand  | -                    |
| Start       | 1   | End     | 2884                 |
| Name        | OJ990105_07.9819.C24.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 2884                 |
| GI          | 5441880   | Score   | 2538                 |
| Exons       | 1..70, 175..325, 829..1144, 1403..1434, 1879..2884  |         |                      |
| GI Descrip. | (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21993  | Seq. ID | OJ990105_07.9819.C24 |
| Gene No. | 45741  | Strand  | -                    |
| Start    | 1  | End     | 2884                 |
| Name     | OJ990105_07.9819.C24.o1.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 1649   | End     | 2029                 |
| GI       | none   | Score   | 79                   |
| Exons    | 1649..1825, 1679..1825, 1710..1829, 1823..2020, 1835..2029 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21993  | Seq. ID | OJ990105_07.9819.C24 |
| Gene No. | 45741  | Strand  | -                    |
| Start    | 1  | End     | 2884                 |
| Name     | OJ990105_07.9819.C24.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 1727   | End     | 2323                 |
| GI       | none   | Score   | 150                  |
| Exons    | 1727..1798, 1862..2161, 1923..2144, 2195..2323, 2217..2315 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21993   | Seq. ID | OJ990105_07.9819.C24 |
| Gene No.    | 45741   | Strand  | -                    |
| Start       | 1   | End     | 2884                 |
| Name        | OJ990105_07.9819.C24.o1.gp  | Method  | AAT/GAP              |
| Start       | 1849  | End     | 2280                 |
| GI          | 5701669   | Score   | 845                  |
| Exons       | 1849..2280  |         |                      |
| GI Descrip. | 5441880/dbj BAA82378.1  5.0e-75 (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21994 | Seq. ID | OJ990105_07.9819.C25 |
|----------|-------|---------|----------------------|

Gene No. 45742  
 Start 671  
 Name OJ990105\_07.9819.C25.o1.gs  
 Start 671  
 GI none  
 Exons 671..934

Strand +  
 End 934  
 Method GENSCAN  
 End 934  
 Score .5

Seq. No. 21995  
 Gene No. 45743  
 Start 1  
 Name OJ990105\_07.9819.C26.o1.np  
 Start 1  
 GI 5441880  
 Exons 1..131, 493..650, 756..1092, 1680..1978, 2055..2313, 2981..3002  
 GI Descrip. (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa]

Seq. ID OJ990105\_07.9819.C26  
 Strand +  
 End 3002  
 Method AAT/NAP  
 End 3002  
 Score 1704

Seq. No. 21995  
 Gene No. 45743  
 Start 1  
 Name OJ990105\_07.9819.C26.o1.gs  
 Start 502  
 GI none  
 Exons 502..650, 756..1002, 1176..1586, 1680..1978, 2055..2313, 2406..2450

Seq. ID OJ990105\_07.9819.C26  
 Strand +  
 End 3002  
 Method GENSCAN  
 End 2450  
 Score .81

Seq. No. 21995  
 Gene No. 45743  
 Start 1  
 Name OJ990105\_07.9819.C26.o1.gp  
 Start 1806  
 GI LIB3475-007-P1-K1-G8  
 Exons 1806..1978, 2055..2305  
 GI Descrip. '5441880/dbj|BAA82378.1| 5.0e-75 (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa]'

Seq. ID OJ990105\_07.9819.C26  
 Strand +  
 End 3002  
 Method AAT/GAP  
 End 2305  
 Score 793

Seq. No. 21996  
 Gene No. 45744  
 Start 1944  
 Name OJ990105\_07.9819.C27.o1.gs  
 Start 1944  
 GI none  
 Exons 1944..2159, 2397..2440, 2682..2703

Seq. ID OJ990105\_07.9819.C27  
 Strand -  
 End 2703  
 Method GENSCAN  
 End 2703  
 Score .84

Seq. No. 21997  
 Gene No. 45745  
 Start 9786  
 Name OJ990105\_07.9819.C28.o1.np  
 Start 9786  
 GI 2911799  
 Exons 9786..10779, 10875..11073, 11206..11419, 11537..11639, 11740..11900  
 GI Descrip. (AF008184) 4-coumarate:CoA ligase 1 [Populus balsamifera subsp. trichocarpa X Populus deltoides]

Seq. ID OJ990105\_07.9819.C28  
 Strand +  
 End 11900  
 Method AAT/NAP  
 End 11900  
 Score 1678

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21997   | Seq. ID | OJ990105_07.9819.C28 |
| Gene No.    | 45745   | Strand  | +                    |
| Start       | 9786  | End     | 11900                |
| Name        | OJ990105_07.9819.C28.o1.gp  | Method  | AAT/GAP              |
| Start       | 9831  | End     | 10211                |
| GI          | uC-osrocyp033f05b1  | Score   | 720                  |
| Exons       | 9831..10211   |         |                      |
| GI Descrip. | '1168218/sp P41636 4CL_PINTA 2.0e-28 4-COUMARATE--COA LIGASE (4CL) >gi_515501 (U12012) 4-coumarate-CoA ligase enzyme [Pinus taeda]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21997   | Seq. ID | OJ990105_07.9819.C28 |
| Gene No.    | 45746   | Strand  | +                    |
| Start       | 18491   | End     | 23142                |
| Name        | OJ990105_07.9819.C28.o3.np  | Method  | AAT/NAP              |
| Start       | 18321   | End     | 21212                |
| GI          | 4539658   | Score   | 107                  |
| Exons       | 18321..18412, 18453..18541, 21161..21212                          |         |                      |
| GI Descrip. | (AF061282) serine carboxypeptidase-like protein [Sorghum bicolor] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21997  | Seq. ID | OJ990105_07.9819.C28 |
| Gene No. | 45746  | Strand  | +                    |
| Start    | 18491  | End     | 23142                |
| Name     | OJ990105_07.9819.C28.o3.gs                             | Method  | GENSCAN              |
| Start    | 18491  | End     | 22659                |
| GI       | none   | Score   | .55                  |
| Exons    | 18491..18493, 19898..20008, 21877..22255, 22528..22659 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21997  | Seq. ID | OJ990105_07.9819.C28 |
| Gene No.    | 45746  | Strand  | +                    |
| Start       | 18491  | End     | 23142                |
| Name        | OJ990105_07.9819.C28.o4.gp   | Method  | AAT/GAP              |
| Start       | 21273  | End     | 21464                |
| GI          | 5667165  | Score   | 340                  |
| Exons       | 21273..21464   |         |                      |
| GI Descrip. | 5670155/gb AF161269.1 AF161269 4.0e-86 Oryza sativa subsp. japonica BAC clone 34K24, complete sequence |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21997  | Seq. ID | OJ990105_07.9819.C28 |
| Gene No.    | 45746  | Strand  | +                    |
| Start       | 18491  | End     | 23142                |
| Name        | OJ990105_07.9819.C28.o4.np                     | Method  | AAT/NAP              |
| Start       | 21540  | End     | 23142                |
| GI          | 6907086  | Score   | 994                  |
| Exons       | 21540..22308, 22621..22883, 23030..23142       |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21997   | Seq. ID | OJ990105_07.9819.C28 |
| Gene No. | 45747   | Strand  | -                    |
| Start    | 12383   | End     | 15847                |
| Name     | OJ990105_07.9819.C28.o3.tm                        | Method  | TBLASTX:Maize        |
| Start    | 9808  | End     | 10215                |
| GI       | none  | Score   | 176                  |
| Exons    | 9808..9984, 9817..9999, 9942..10184, 10006..10215 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21997 | Seq. ID | OJ990105_07.9819.C28 |
|----------|-------|---------|----------------------|

|          |  |         |                      |
|----------|--|---------|----------------------|
| Gene No. | 45747  | Strand  | -                    |
| Start    | 12383  | End     | 15847                |
| Name     | OJ990105_07.9819.C28.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 9823   | End     | 11850                |
| GI       | none   | Score   | 335                  |
| Exons    | 9823..10215, 9844..10050, 9960..10184, 10327..10779, 10327..10455, 10344..10799, 10848..11075, 10874..11074, 11196..11267, 11316..11384, 11537..11674, 11538..11642, 11728..11850, 11739..11846    |         |                      |
|          |  |         |                      |
| Seq. No. | 21997  | Seq. ID | OJ990105_07.9819.C28 |
| Gene No. | 45747  | Strand  | -                    |
| Start    | 12383  | End     | 15847                |
| Name     | OJ990105_07.9819.C28.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 9844   | End     | 11840                |
| GI       | none   | Score   | 286                  |
| Exons    | 9844..10206, 9987..10181, 10252..10317, 10327..10779, 10344..10454, 10536..10778, 10863..11075, 10871..11074, 11196..11267, 11316..11384, 11540..11650, 11541..11642, 11737..11838, 11739..11840   |         |                      |
|          |  |         |                      |
| Seq. No. | 21997  | Seq. ID | OJ990105_07.9819.C28 |
| Gene No. | 45747  | Strand  | -                    |
| Start    | 12383  | End     | 15847                |
| Name     | OJ990105_07.9819.C28.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 9940   | End     | 10631                |
| GI       | none   | Score   | 207                  |
| Exons    | 9940..10203, 9960..10184, 10324..10455, 10327..10629, 10344..10631   |         |                      |
|          |  |         |                      |
| Seq. No. | 21997  | Seq. ID | OJ990105_07.9819.C28 |
| Gene No. | 45747  | Strand  | -                    |
| Start    | 12383  | End     | 15847                |
| Name     | OJ990105_07.9819.C28.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 10453  | End     | 11850                |
| GI       | none   | Score   | 356                  |
| Exons    | 10453..10779, 10485..10799, 10863..11075, 10864..10935, 10871..11074, 10903..11076, 10910..11089, 11196..11267, 11316..11384, 11538..11582, 11552..11641, 11595..11642, 11737..11850, 11739..11846 |         |                      |
|          |  |         |                      |
| Seq. No. | 21997  | Seq. ID | OJ990105_07.9819.C28 |
| Gene No. | 45747  | Strand  | -                    |
| Start    | 12383  | End     | 15847                |
| Name     | OJ990105_07.9819.C28.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 11316  | End     | 11856                |
| GI       | none   | Score   | 101                  |
| Exons    | 11316..11384, 11537..11641, 11538..11642, 11737..11856, 11737..11850, 11739..11852   |         |                      |
|          |  |         |                      |
| Seq. No. | 21997  | Seq. ID | OJ990105_07.9819.C28 |
| Gene No. | 45747  | Strand  | -                    |
| Start    | 12383  | End     | 15847                |
| Name     | OJ990105_07.9819.C28.o2.gp   | Method  | AAT/GAP              |
| Start    | 12122  | End     | 13123                |
| GI       | uC-osflcyp161g03a1   | Score   | 718                  |
| Exons    | 12122..12469, 13073..13123   |         |                      |

GI Descrip. '4126473/dbj|BAA36585| 1.0e-08 (AB014884) adenylyl cyclase associated protein [Gossypium hirsutum]'

Seq. No. 21997 Seq. ID OJ990105\_07.9819.C28  
Gene No. 45747 Strand -  
Start 12383 End 15847  
Name OJ990105\_07.9819.C28.o2.gs Method GENSCAN  
Start 12383 End 15839  
GI none Score .89  
Exons 12383..12469, 13073..13216, 13325..13381, 13454..13509,  
13603..13712, 13804..13951, 14044..14317, 14984..15048,  
15226..15394, 15555..15839

Seq. No. 21997 Seq. ID OJ990105\_07.9819.C28  
Gene No. 45747 Strand -  
Start 12383 End 15847  
Name OJ990105\_07.9819.C28.o2.ts Method TBLASTX:Soybean  
Start 12383 End 13958  
GI none Score 76  
Exons 12383..12466, 12387..12467, 13058..13219, 13059..13217,  
13325..13435, 13329..13379, 13452..13511, 13454..13510,  
13599..13715, 13601..13714, 13602..13715, 13798..13953,  
13803..13958

Seq. No. 21997 Seq. ID OJ990105\_07.9819.C28  
Gene No. 45747 Strand -  
Start 12383 End 15847  
Name OJ990105\_07.9819.C28.o2.tc Method TBLASTX:Cress  
Start 12383 End 15845  
GI none Score 128  
Exons 12383..12466, 13058..13219, 13071..13217, 13323..13382,  
13325..13441, 13329..13379, 13452..13511, 13457..13510,  
13601..13714, 13602..13715, 13803..13988, 14060..14101,  
14061..14114, 14183..14320, 14184..14276, 14192..14329,  
14981..15049, 14983..15030, 14997..15053, 15224..15400,  
15522..15725, 15789..15845

Seq. No. 21997 Seq. ID OJ990105\_07.9819.C28  
Gene No. 45747 Strand -  
Start 12383 End 15847  
Name OJ990105\_07.9819.C28.o2.np Method AAT/NAP  
Start 12386 End 15839  
GI 4126473 Score 1204  
Exons 12386..12469, 13073..13216, 13325..13381, 13454..13509,  
13603..13712, 13804..13964, 14060..14317, 14984..15048,  
15226..15394, 15555..15839

GI Descrip. (AB014884) adenylyl cyclase associated protein [Gossypium hirsutum]

Seq. No. 21997 Seq. ID OJ990105\_07.9819.C28  
Gene No. 45747 Strand -  
Start 12383 End 15847  
Name OJ990105\_07.9819.C28.o2.tm Method TBLASTX:Maize  
Start 12395 End 13719  
GI none Score 117  
Exons 12395..12466, 13058..13219, 13071..13217, 13323..13382,  
13325..13435, 13329..13379, 13454..13510, 13599..13715,

13601..13714, 13609..13719

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21997  | Seq. ID | OJ990105_07.9819.C28 |
| Gene No. | 45747  | Strand  | -                    |
| Start    | 12383  | End     | 15847                |
| Name     | OJ990105_07.9819.C28.o4.tm                             | Method  | TBLASTX:Maize        |
| Start    | 13906  | End     | 14307                |
| GI       | none   | Score   | .66                  |
| Exons    | 13906..13953, 13908..14012, 14038..14307, 14183..14305 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21997  | Seq. ID | OJ990105_07.9819.C28 |
| Gene No.    | 45747  | Strand  | -                    |
| Start       | 12383  | End     | 15847                |
| Name        | OJ990105_07.9819.C28.o3.gp   | Method  | AAT/GAP              |
| Start       | 15007  | End     | 15847                |
| GI          | 32234_1.R1084  | Score   | .922                 |
| Exons       | 15007..15048, 15226..15394, 15555..15847   |         |                      |
| GI Descrip. | '5670155/gb AF161269.1 AF161269 4.0e-86 Oryza sativa subsp. japonica BAC clone 34K24, complete sequence' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21998                      | Seq. ID | OJ990105_07.9819.C29 |
| Gene No. | 45748                      | Strand  | +                    |
| Start    | 82                         | End     | 587                  |
| Name     | OJ990105_07.9819.C29.o1.gs | Method  | GENSCAN              |
| Start    | 82                         | End     | 587                  |
| GI       | none                       | Score   | .66                  |
| Exons    | 82..269, 474..587          |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21998  | Seq. ID | OJ990105_07.9819.C29 |
| Gene No. | 45749  | Strand  | +                    |
| Start    | 5694   | End     | 10861                |
| Name     | OJ990105_07.9819.C29.o3.gs                       | Method  | GENSCAN              |
| Start    | 5694   | End     | 10861                |
| GI       | none   | Score   | .9                   |
| Exons    | 5694..6020, 7096..9137, 9613..9796, 10751..10861 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21998  | Seq. ID | OJ990105_07.9819.C29 |
| Gene No. | 45750  | Strand  | -                    |
| Start    | 920  | End     | 4830                 |
| Name     | OJ990105_07.9819.C29.o2.gs   | Method  | GENSCAN              |
| Start    | 920  | End     | 4830                 |
| GI       | none   | Score   | .45                  |
| Exons    | 920..996, 1390..1399, 1447..2592, 2688..3738, 4288..4413, 4508..4640, 4827..4830 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21998  | Seq. ID | OJ990105_07.9819.C29 |
| Gene No.    | 45750  | Strand  | -                    |
| Start       | 920  | End     | 4830                 |
| Name        | OJ990105_07.9819.C29.o1.np                                 | Method  | AAT/NAP              |
| Start       | 1077   | End     | 3615                 |
| GI          | 4680209  | Score   | .901                 |
| Exons       | 1077..1226, 1646..2123, 2370..2454, 2685..3032, 3231..3615 |         |                      |
| GI Descrip. | (AF114171) unknown [Sorghum bicolor]                       |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 21998 | Seq. ID | OJ990105_07.9819.C29 |
| Gene No. | 45751 | Strand  | -                    |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Start    | 11204  | End     | 11701                |
| Name     | OJ990105_07.9819.C29.o5.tm   | Method  | TBLASTX:Maize        |
| Start    | 1237   | End     | 1444                 |
| GI       | none   | Score   | 88                   |
| Exons    | 1237..1443, 1238..1441, 1289..1444   |         |                      |
|          |  |         |                      |
| Seq. No. | 21998  | Seq. ID | OJ990105_07.9819.C29 |
| Gene No. | 45751  | Strand  | -                    |
| Start    | 11204  | End     | 11701                |
| Name     | OJ990105_07.9819.C29.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1597   | End     | 2244                 |
| GI       | none   | Score   | 130                  |
| Exons    | 1597..1869, 1613..1816, 1888..1947, 1945..2223, 1967..2218, 2023..2244   |         |                      |
|          |  |         |                      |
| Seq. No. | 21998  | Seq. ID | OJ990105_07.9819.C29 |
| Gene No. | 45751  | Strand  | -                    |
| Start    | 11204  | End     | 11701                |
| Name     | OJ990105_07.9819.C29.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 2248   | End     | 2595                 |
| GI       | none   | Score   | 166                  |
| Exons    | 2248..2595, 2255..2593   |         |                      |
|          |  |         |                      |
| Seq. No. | 21998  | Seq. ID | OJ990105_07.9819.C29 |
| Gene No. | 45751  | Strand  | -                    |
| Start    | 11204  | End     | 11701                |
| Name     | OJ990105_07.9819.C29.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 7345   | End     | 7840                 |
| GI       | none   | Score   | 42                   |
| Exons    | 7345..7401, 7346..7384, 7403..7420, 7437..7526, 7441..7533, 7441..7524, 7531..7665, 7536..7664, 7666..7695, 7668..7697, 7789..7839, 7793..7840   |         |                      |
|          |  |         |                      |
| Seq. No. | 21998  | Seq. ID | OJ990105_07.9819.C29 |
| Gene No. | 45751  | Strand  | -                    |
| Start    | 11204  | End     | 11701                |
| Name     | OJ990105_07.9819.C29.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 8143   | End     | 9106                 |
| GI       | none   | Score   | 37                   |
| Exons    | 8143..8190, 8197..8259, 8587..8748, 8593..8745, 8705..8746, 8734..8817, 8747..8809, 8772..8828, 8808..8858, 8860..8988, 8867..8995, 8881..8982, 8882..8989, 8889..8993, 8982..9065, 8983..9081, 8987..9106, 9035..9106 |         |                      |
|          |  |         |                      |
| Seq. No. | 21998  | Seq. ID | OJ990105_07.9819.C29 |
| Gene No. | 45751  | Strand  | -                    |
| Start    | 11204  | End     | 11701                |
| Name     | OJ990105_07.9819.C29.o4.gs   | Method  | GENSCAN              |
| Start    | 11204  | End     | 11701                |
| GI       | none   | Score   | .8                   |
| Exons    | 11204..11384, 11697..11701   |         |                      |
|          |  |         |                      |
| Seq. No. | 21999  | Seq. ID | OJ990105_07.9819.C30 |
| Gene No. | 45752  | Strand  | +                    |
| Start    | 941  | End     | 1458                 |
| Name     | OJ990105_07.9819.C30.o1.gs   | Method  | GENSCAN              |
| Start    | 941  | End     | 1458                 |



|             |  |         |                      |
|-------------|--|---------|----------------------|
| GI          | none   | Score   | .83                  |
| Exons       | 941..1016, 1045..1458  |         |                      |
| Seq. No.    | 21999  | Seq. ID | OJ990105_07.9819.C30 |
| Gene No.    | 45753  | Strand  | +                    |
| Start       | 1705   | End     | 7920                 |
| Name        | OJ990105_07.9819.C30.o2.np   | Method  | AAT/NAP              |
| Start       | 1705   | End     | 6926                 |
| GI          | 4539295  | Score   | 584                  |
| Exons       | 1705..1800, 3597..3670, 3793..3865, 4808..4933, 5324..5566, 6157..6280, 6476..6530, 6563..6675, 6792..6926 |         |                      |
| GI Descrip. | (AL049480) putative protein [Arabidopsis thaliana]   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21999                      | Seq. ID | OJ990105_07.9819.C30 |
| Gene No. | 45753                      | Strand  | +                    |
| Start    | 1705                       | End     | 7920                 |
| Name     | OJ990105_07.9819.C30.o1.gp | Method  | AAT/GAP              |
| Start    | 3211                       | End     | 3580                 |
| GI       | none                       | Score   | 670                  |
| Exons    | 3211..3580                 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21999  | Seq. ID | OJ990105_07.9819.C30 |
| Gene No. | 45753  | Strand  | +                    |
| Start    | 1705   | End     | 7920                 |
| Name     | OJ990105_07.9819.C30.o2.gs   | Method  | GENSCAN              |
| Start    | 3363   | End     | 7082                 |
| GI       | none   | Score   | .75                  |
| Exons    | 3363..3670, 3793..3860, 4833..4890, 5179..5264, 5388..5566, 6792..6900, 6985..7082 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 21999  | Seq. ID | OJ990105_07.9819.C30 |
| Gene No.    | 45753  | Strand  | +                    |
| Start       | 1705   | End     | 7920                 |
| Name        | OJ990105_07.9819.C30.o2.gp   | Method  | AAT/GAP              |
| Start       | 3578   | End     | 6261                 |
| GI          | 10404_1.R1084  | Score   | 1003                 |
| Exons       | 3578..3670, 3793..3860, 4833..4903, 5324..5566, 6144..6261                           |         |                      |
| GI Descrip. | '4539295/emb CAB39598.1  7.0e-46 (AL049480) putative protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 21999  | Seq. ID | OJ990105_07.9819.C30 |
| Gene No. | 45753  | Strand  | +                    |
| Start    | 1705   | End     | 7920                 |
| Name     | OJ990105_07.9819.C30.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4859   | End     | 5569                 |
| GI       | none   | Score   | 66                   |
| Exons    | 4859..4918, 4865..4903, 5342..5482, 5359..5430, 5488..5568, 5489..5569 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 21999                      | Seq. ID | OJ990105_07.9819.C30 |
| Gene No. | 45753                      | Strand  | +                    |
| Start    | 1705                       | End     | 7920                 |
| Name     | OJ990105_07.9819.C30.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 6154                       | End     | 6324                 |
| GI       | none                       | Score   | 253                  |
| Exons    | 6154..6324, 6156..6323     |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 21999   | Seq. ID | OJ990105_07.9819.C30 |
| Gene No. | 45753   | Strand  | +                    |
| Start    | 1705  | End     | 7920                 |
| Name     | OJ990105_07.9819.C30.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 6220  | End     | 7884                 |
| GI       | none  | Score   | 164                  |
| Exons    | 6220..6321, 6221..6307, 6478..6534, 6482..6514, 6516..6551,<br>6624..6683, 6625..6675, 6789..6899, 6791..6862, 6982..7044,<br>6986..7045, 6987..7061, 7043..7093, 7050..7106, 7054..7098,<br>7708..7794, 7710..7784, 7834..7872, 7864..7884 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 21999   | Seq. ID | OJ990105_07.9819.C30 |
| Gene No.    | 45753   | Strand  | +                    |
| Start       | 1705  | End     | 7920                 |
| Name        | OJ990105_07.9819.C30.o3.gp  | Method  | AAT/GAP              |
| Start       | 6777  | End     | 7920                 |
| GI          | 12659_1.R1084   | Score   | 688                  |
| Exons       | 6777..6900, 6985..7082, 7711..7920                                  |         |                      |
| GI Descrip. | '3540182 3.0e-12 (AC004122) Unknown protein [Arabidopsis thaliana]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22000   | Seq. ID | OJ990105_07.9819.C31 |
| Gene No.    | 45754   | Strand  | +                    |
| Start       | 1644  | End     | 2742                 |
| Name        | OJ990105_07.9819.C31.o1.np                        | Method  | AAT/NAP              |
| Start       | 1644  | End     | 2434                 |
| GI          | 5420387   | Score   | 248                  |
| Exons       | 1644..2434  |         |                      |
| GI Descrip. | (AJ243459) proteophosphoglycan [Leishmania major] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22000                      | Seq. ID | OJ990105_07.9819.C31 |
| Gene No. | 45754                      | Strand  | +                    |
| Start    | 1644                       | End     | 2742                 |
| Name     | OJ990105_07.9819.C31.o1.gs | Method  | GENSCAN              |
| Start    | 1750                       | End     | 2742                 |
| GI       | none                       | Score   | 1                    |
| Exons    | 1750..2742                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22000                      | Seq. ID | OJ990105_07.9819.C31 |
| Gene No. | 45754                      | Strand  | +                    |
| Start    | 1644                       | End     | 2742                 |
| Name     | OJ990105_07.9819.C31.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 2142                       | End     | 2532                 |
| GI       | none                       | Score   | 397                  |
| Exons    | 2142..2531, 2146..2532     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22000  | Seq. ID | OJ990105_07.9819.C31 |
| Gene No. | 45754  | Strand  | +                    |
| Start    | 1644   | End     | 2742                 |
| Name     | OJ990105_07.9819.C31.o1.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 2199   | End     | 2556                 |
| GI       | none   | Score   | 80                   |
| Exons    | 2199..2267, 2200..2268, 2340..2552, 2344..2556 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22001 | Seq. ID | OJ990105_07.9819.C32 |
| Gene No. | 45755 | Strand  | +                    |
| Start    | 461   | End     | 6153                 |

|       |   |        |         |
|-------|---|--------|---------|
| Name  | OJ990105_07.9819.C32.o1.gs  | Method | GENSCAN |
| Start | 461   | End    | 6153    |
| GI    | none  | Score  | .75     |
| Exons | 461..553, 597..1027, 1853..2185, 3125..3261, 3817..4049, 4547..4693, 5968..6153 |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22001  | Seq. ID | OJ990105_07.9819.C32 |
| Gene No. | 45756  | Strand  | -                    |
| Start    | 8992   | End     | 9372                 |
| Name     | OJ990105_07.9819.C32.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 248  | End     | 632                  |
| GI       | none   | Score   | 83                   |
| Exons    | 248..424, 265..510, 292..393, 332..577, 465..518, 575..631, 579..632 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22001                        | Seq. ID | OJ990105_07.9819.C32 |
| Gene No. | 45756                        | Strand  | -                    |
| Start    | 8992                         | End     | 9372                 |
| Name     | OJ990105_07.9819.C32.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 753                          | End     | 986                  |
| GI       | none                         | Score   | 196                  |
| Exons    | 753..986, 803..850, 905..985 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22001   | Seq. ID | OJ990105_07.9819.C32 |
| Gene No. | 45756   | Strand  | -                    |
| Start    | 8992  | End     | 9372                 |
| Name     | OJ990105_07.9819.C32.o3.tm  | Method  | TBLASTX:Maize        |
| Start    | 899   | End     | 1945                 |
| GI       | none  | Score   | 194                  |
| Exons    | 899..1027, 900..1028, 901..1035, 1850..1945, 1851..1928, 1852..1941 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22001  | Seq. ID | OJ990105_07.9819.C32 |
| Gene No. | 45756  | Strand  | -                    |
| Start    | 8992   | End     | 9372                 |
| Name     | OJ990105_07.9819.C32.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 3969   | End     | 4731                 |
| GI       | none   | Score   | 108                  |
| Exons    | 3969..4049, 3971..4048, 4544..4714, 4546..4731, 4546..4725 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22001                      | Seq. ID | OJ990105_07.9819.C32 |
| Gene No. | 45756                      | Strand  | -                    |
| Start    | 8992                       | End     | 9372                 |
| Name     | OJ990105_07.9819.C32.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 4570                       | End     | 4714                 |
| GI       | none                       | Score   | 191                  |
| Exons    | 4570..4713, 4571..4714     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22001                      | Seq. ID | OJ990105_07.9819.C32 |
| Gene No. | 45756                      | Strand  | -                    |
| Start    | 8992                       | End     | 9372                 |
| Name     | OJ990105_07.9819.C32.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 7764                       | End     | 7970                 |
| GI       | none                       | Score   | 184                  |
| Exons    | 7764..7970                 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22001 | Seq. ID | OJ990105_07.9819.C32 |
|----------|-------|---------|----------------------|

Gene No. 45756  
 Start 8992  
 Name OJ990105\_07.9819.C32.o2.gs  
 Start 8992  
 GI none  
 Exons 8992..9372

Strand -  
 End 9372  
 Method GENSCAN  
 End 9372  
 Score .43

Seq. No. 22002  
 Gene No. 45757  
 Start 1010  
 Name OJ990105\_07.9819.C33.o1.gs  
 Start 1010  
 GI none  
 Exons 1010..1417

Seq. ID OJ990105\_07.9819.C33  
 Strand +  
 End 1417  
 Method GENSCAN  
 End 1417  
 Score .88

Seq. No. 22003  
 Gene No. 45758  
 Start 593  
 Name OJ990105\_07.9819.C35.o1.gs  
 Start 593  
 GI none  
 Exons 593..750

Seq. ID OJ990105\_07.9819.C35  
 Strand +  
 End 750  
 Method GENSCAN  
 End 750  
 Score .75

Seq. No. 22004  
 Gene No. 45759  
 Start 778  
 Name OJ990105\_07.9819.C37.o1.gs  
 Start 778  
 GI none  
 Exons 778..978

Seq. ID OJ990105\_07.9819.C37  
 Strand -  
 End 978  
 Method GENSCAN  
 End 978  
 Score .74

Seq. No. 22005  
 Gene No. 45760  
 Start 759  
 Name OJ990105\_07.9819.C38.o1.gs  
 Start 759  
 GI none  
 Exons 759..941

Seq. ID OJ990105\_07.9819.C38  
 Strand -  
 End 941  
 Method GENSCAN  
 End 941  
 Score .63

Seq. No. 22006  
 Gene No. 45761  
 Start 906  
 Name OJ990105\_01.9819.C1.o1.gs  
 Start 906  
 GI none  
 Exons 906..1153

Seq. ID OJ990105\_01.9819.C1  
 Strand -  
 End 1958  
 Method GENSCAN  
 End 1153  
 Score .7

Seq. No. 22006  
 Gene No. 45761  
 Start 906  
 Name OJ990105\_01.9819.C1.o1.np  
 Start 909  
 GI 4680179  
 Exons 909..1592, 1932..1958  
 GI Descrip. (AF111709) polyprotein [Oryza sativa subsp. indica]

Seq. ID OJ990105\_01.9819.C1  
 Strand -  
 End 1958  
 Method AAT/NAP  
 End 1958  
 Score 359

Seq. No. 22007

Seq. ID OJ990105\_01.9819.C2

|          |   |        |               |
|----------|---|--------|---------------|
| Gene No. | 45762                                   | Strand | -             |
| Start    | 994                                     | End    | 1176          |
| Name     | OJ990105_01.9819.C2.o1.tw               | Method | TBLASTX:Wheat |
| Start    | 677                                     | End    | 1045          |
| GI       | none                                    | Score  | 58            |
| Exons    | 677..790, 678..791, 836..1045, 837..989 |        |               |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22007                     | Seq. ID | OJ990105_01.9819.C2 |
| Gene No. | 45762                     | Strand  | -                   |
| Start    | 994                       | End     | 1176                |
| Name     | OJ990105_01.9819.C2.o1.gs | Method  | GENSCAN             |
| Start    | 994                       | End     | 1176                |
| GI       | none                      | Score   | .92                 |
| Exons    | 994..1176                 |         |                     |

|             |                                      |         |                     |
|-------------|--------------------------------------|---------|---------------------|
| Seq. No.    | 22008                                | Seq. ID | OJ990105_01.9819.C3 |
| Gene No.    | 45763                                | Strand  | +                   |
| Start       | 449                                  | End     | 1088                |
| Name        | OJ990105_01.9819.C3.o1.np            | Method  | AAT/NAP             |
| Start       | 449                                  | End     | 1036                |
| GI          | 5852180                              | Score   | 483                 |
| Exons       | 449..567, 619..1036                  |         |                     |
| GI Descrip. | (AL117265) zhb00010.1 [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22008                     | Seq. ID | OJ990105_01.9819.C3 |
| Gene No. | 45763                     | Strand  | +                   |
| Start    | 449                       | End     | 1088                |
| Name     | OJ990105_01.9819.C3.o1.gs | Method  | GENSCAN             |
| Start    | 612                       | End     | 1088                |
| GI       | none                      | Score   | .99                 |
| Exons    | 612..1088                 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22008  | Seq. ID | OJ990105_01.9819.C3 |
| Gene No.    | 45764  | Strand  | +                   |
| Start       | 2191   | End     | 2572                |
| Name        | OJ990105_01.9819.C3.o2.gp  | Method  | AAT/GAP             |
| Start       | 2191   | End     | 2572                |
| GI          | uC-osflcyp033a04b1   | Score   | 687                 |
| Exons       | 2191..2572   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22008   | Seq. ID | OJ990105_01.9819.C3 |
| Gene No.    | 45765   | Strand  | -                   |
| Start       | 2124  | End     | 3359                |
| Name        | OJ990105_01.9819.C3.o2.np                       | Method  | AAT/NAP             |
| Start       | 2124  | End     | 3359                |
| GI          | 4680186   | Score   | 327                 |
| Exons       | 2124..2323, 3338..3359                          |         |                     |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45766                     | Strand  | +                   |
| Start    | 359                       | End     | 2248                |
| Name     | OJ990105_01.9819.C4.o1.gs | Method  | GENSCAN             |
| Start    | 359                       | End     | 2248                |
| GI       | none                      | Score   | .83                 |

Exons 359..508, 1439..2248

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22009   | Seq. ID | OJ990105_01.9819.C4 |
| Gene No.    | 45767   | Strand  | +                   |
| Start       | 2474  | End     | 6991                |
| Name        | OJ990105_01.9819.C4.o1.np                           | Method  | AAT/NAP             |
| Start       | 2474  | End     | 6991                |
| GI          | 4680179   | Score   | 5353                |
| Exons       | 2474..3556, 3590..6991                              |         |                     |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No.    | 45768  | Strand  | +                   |
| Start       | 9239   | End     | 13165               |
| Name        | OJ990105_01.9819.C4.o2.gp  | Method  | AAT/GAP             |
| Start       | 9061   | End     | 9442                |
| GI          | uC-osflcyp033a04b1   | Score   | 687                 |
| Exons       | 9061..9442   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45768                     | Strand  | +                   |
| Start    | 9239                      | End     | 13165               |
| Name     | OJ990105_01.9819.C4.o3.gs | Method  | GENSCAN             |
| Start    | 9239                      | End     | 13165               |
| GI       | none                      | Score   | .67                 |
| Exons    | 9239..9310, 12356..13165  |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No.    | 45768  | Strand  | +                   |
| Start       | 9239   | End     | 13165               |
| Name        | OJ990105_01.9819.C4.o4.gp  | Method  | AAT/GAP             |
| Start       | 11084  | End     | 11467               |
| GI          | uC-osflcyp033a04b1   | Score   | 629                 |
| Exons       | 11084..11467   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22009   | Seq. ID | OJ990105_01.9819.C4 |
| Gene No.    | 45769   | Strand  | +                   |
| Start       | 13414   | End     | 18943               |
| Name        | OJ990105_01.9819.C4.o4.np                           | Method  | AAT/NAP             |
| Start       | 13411   | End     | 18943               |
| GI          | 4680179   | Score   | 166                 |
| Exons       | 13411..13769, 14190..14341, 18839..18943            |         |                     |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45769                     | Strand  | +                   |
| Start    | 13414                     | End     | 18943               |
| Name     | OJ990105_01.9819.C4.o4.gs | Method  | GENSCAN             |
| Start    | 13414                     | End     | 13815               |
| GI       | none                      | Score   | .69                 |
| Exons    | 13414..13815              |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22009 | Seq. ID | OJ990105_01.9819.C4 |
|----------|-------|---------|---------------------|

Gene No. 45770  
 Start 20925  
 Name OJ990105\_01.9819.C4.o7.gs  
 Start 20925  
 GI none  
 Exons 20925..21068, 21550..21645

Strand +  
 End 21645  
 Method GENSCAN  
 End 21645  
 Score .95

Seq. No. 22009  
 Gene No. 45771  
 Start 1  
 Name OJ990105\_01.9819.C4.o2.np  
 Start 1  
 GI 5852180  
 Exons 1..19, 7721..8137, 8189..8307, 9292..9344, 18139..18176  
 GI Descrip. (AL117265) zhb00010.1 [Oryza sativa]

Seq. ID OJ990105\_01.9819.C4  
 Strand -  
 End 20034  
 Method AAT/NAP  
 End 18176  
 Score 549

Seq. No. 22009  
 Gene No. 45771  
 Start 1  
 Name OJ990105\_01.9819.C4.o5.gs  
 Start 14530  
 GI none  
 Exons 14530..14802

Seq. ID OJ990105\_01.9819.C4  
 Strand -  
 End 20034  
 Method GENSCAN  
 End 14802  
 Score 1

Seq. No. 22009  
 Gene No. 45771  
 Start 1  
 Name OJ990105\_01.9819.C4.o6.gp  
 Start 15149  
 GI uC-osroM202024h08a1  
 Exons 15149..15215  
 GI Descrip. '5852170/emb|AL117265.1|OST17804 5.0e-84 Oryza sativa indica(GLA4) genomic DNA, chromosome 4, BAC clone:t17804'

Seq. ID OJ990105\_01.9819.C4  
 Strand -  
 End 20034  
 Method AAT/GAP  
 End 15215  
 Score 88

Seq. No. 22009  
 Gene No. 45771  
 Start 1  
 Name OJ990105\_01.9819.C4.o7.gp  
 Start 16335  
 GI 61605\_3.R1084  
 Exons 16335..16593  
 GI Descrip. '1402920/emb|CAA66965| 2.0e-20 (X98321) peroxidase [Arabidopsis thaliana]'

Seq. ID OJ990105\_01.9819.C4  
 Strand -  
 End 20034  
 Method AAT/GAP  
 End 16593  
 Score 431

Seq. No. 22009  
 Gene No. 45771  
 Start 1  
 Name OJ990105\_01.9819.C4.o6.gs  
 Start 17012  
 GI none  
 Exons 17012..17529, 17602..17747, 18036..18107, 18131..18634, 18706..18763, 18890..18965, 19077..19201, 19369..19617, 19935..20034

Seq. ID OJ990105\_01.9819.C4  
 Strand -  
 End 20034  
 Method GENSCAN  
 End 20034  
 Score .42

Seq. No. 22009  
 Gene No. 45771  
 Start 1

Seq. ID OJ990105\_01.9819.C4  
 Strand -  
 End 20034

|             |  |        |         |
|-------------|--|--------|---------|
| Name        | OJ990105_01.9819.C4.o5.np  | Method | AAT/NAP |
| Start       | 17872  | End    | 19478   |
| GI          | 6721561  | Score  | 939     |
| Exons       | 17872..18634, 18706..18763, 18831..19046, 19446..19478   |        |         |
| GI Descrip. | (AP001073) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]                            |        |         |
|             | gi 6815086 dbj BAA90372.1  (AP001081) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa] |        |         |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772  | Strand  | -                   |
| Start    | 23186  | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o10.tw                       | Method  | TBLASTX:Wheat       |
| Start    | 2654   | End     | 13776               |
| GI       | none   | Score   | 211                 |
| Exons    | 2654..2701, 2714..2911, 2716..2913, 13654..13776 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                     | Strand  | -                   |
| Start    | 23186                     | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o8.tw | Method  | TBLASTX:Wheat       |
| Start    | 2947                      | End     | 3298                |
| GI       | none                      | Score   | 270                 |
| Exons    | 2947..3141, 2963..3298    |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22009                              | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                              | Strand  | -                   |
| Start    | 23186                              | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o8.tm          | Method  | TBLASTX:Maize       |
| Start    | 2962                               | End     | 3253                |
| GI       | none                               | Score   | 219                 |
| Exons    | 2962..3078, 2963..3253, 3169..3243 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772  | Strand  | -                   |
| Start    | 23186  | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o9.tw                                  | Method  | TBLASTX:Wheat       |
| Start    | 3617   | End     | 4054                |
| GI       | none   | Score   | 160                 |
| Exons    | 3617..3844, 3673..3825, 3871..3984, 3872..3985, 4013..4054 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22009                              | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                              | Strand  | -                   |
| Start    | 23186                              | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o4.tw          | Method  | TBLASTX:Wheat       |
| Start    | 4150                               | End     | 4636                |
| GI       | none                               | Score   | 52                  |
| Exons    | 4150..4593, 4154..4204, 4259..4636 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                     | Strand  | -                   |
| Start    | 23186                     | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o7.tm | Method  | TBLASTX:Maize       |
| Start    | 4165                      | End     | 4455                |
| GI       | none                      | Score   | 267                 |
| Exons    | 4165..4455, 4166..4453    |         |                     |



|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772  | Strand  | -                   |
| Start    | 23186  | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o4.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 4523   | End     | 5023                |
| GI       | none   | Score   | 167                 |
| Exons    | 4523..4702, 4531..4677, 4709..5023, 4849..4902, 4930..4980 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772  | Strand  | -                   |
| Start    | 23186  | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o2.ts                                  | Method  | TBLASTX:Soybean     |
| Start    | 4577   | End     | 4972                |
| GI       | none   | Score   | 57                  |
| Exons    | 4577..4609, 4579..4608, 4613..4972, 4615..4653, 4681..4971 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                     | Strand  | -                   |
| Start    | 23186                     | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o6.tw | Method  | TBLASTX:Wheat       |
| Start    | 4685                      | End     | 4987                |
| GI       | none                      | Score   | 381                 |
| Exons    | 4685..4987, 4687..4971    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                     | Strand  | -                   |
| Start    | 23186                     | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o3.tw | Method  | TBLASTX:Wheat       |
| Start    | 4988                      | End     | 5410                |
| GI       | none                      | Score   | 598                 |
| Exons    | 4988..5410, 5020..5409    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                     | Strand  | -                   |
| Start    | 23186                     | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o5.ts | Method  | TBLASTX:Soybean     |
| Start    | 4994                      | End     | 5239                |
| GI       | none                      | Score   | 207                 |
| Exons    | 4994..5239, 5011..5238    |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22009                              | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                              | Strand  | -                   |
| Start    | 23186                              | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o3.tm          | Method  | TBLASTX:Maizé       |
| Start    | 5059                               | End     | 5422                |
| GI       | none                               | Score   | 482                 |
| Exons    | 5059..5409, 5060..5413, 5060..5422 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                     | Strand  | -                   |
| Start    | 23186                     | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o2.tw | Method  | TBLASTX:Wheat       |
| Start    | 5413                      | End     | 5980                |
| GI       | none                      | Score   | 664                 |
| Exons    | 5413..5979, 5444..5980    |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22009                              | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                              | Strand  | -                   |
| Start    | 23186                              | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o2.tc          | Method  | TBLASTX:Cress       |
| Start    | 5687                               | End     | 6004                |
| GI       | none                               | Score   | 90                  |
| Exons    | 5687..5860, 5861..6004, 5863..6003 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                     | Strand  | -                   |
| Start    | 23186                     | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o4.ts | Method  | TBLASTX:Soybean     |
| Start    | 5768                      | End     | 6028                |
| GI       | none                      | Score   | 296                 |
| Exons    | 5768..6028, 5773..6027    |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22009                              | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                              | Strand  | -                   |
| Start    | 23186                              | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o6.tm          | Method  | TBLASTX:Maize       |
| Start    | 5826                               | End     | 6118                |
| GI       | none                               | Score   | 89                  |
| Exons    | 5826..5987, 5827..6114, 5828..6118 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22009                              | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                              | Strand  | -                   |
| Start    | 23186                              | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o1.tw          | Method  | TBLASTX:Wheat       |
| Start    | 5987                               | End     | 6613                |
| GI       | none                               | Score   | 692                 |
| Exons    | 5987..6613, 6043..6501, 6080..6610 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772  | Strand  | -                   |
| Start    | 23186  | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o1.tm                      | Method  | TBLASTX:Maize       |
| Start    | 6167   | End     | 6766                |
| GI       | none   | Score   | 239                 |
| Exons    | 6167..6334, 6175..6321, 6326..6766, 6331..6750 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22009                              | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                              | Strand  | -                   |
| Start    | 23186                              | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o7.tw          | Method  | TBLASTX:Wheat       |
| Start    | 6613                               | End     | 6946                |
| GI       | none                               | Score   | 318                 |
| Exons    | 6613..6882, 6614..6946, 6617..6925 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772  | Strand  | -                   |
| Start    | 23186  | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o8.gs  | Method  | GENSCAN             |
| Start    | 23186  | End     | 29702               |
| GI       | none   | Score   | .46                 |
| Exons    | 23186..23275, 23599..23736, 23787..23840, 26197..26551, 26708..27004, 28029..28209, 28354..28450, 29074..29702 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No.    | 45772  | Strand  | -                   |
| Start       | 23186  | End     | 31325               |
| Name        | OJ990105_01.9819.C4.o9.gp  | Method  | AAT/GAP             |
| Start       | 24791  | End     | 25097               |
| GI          | uC-osflcyp033a04b1   | Score   | 506                 |
| Exons       | 24791..25097   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22009   | Seq. ID | OJ990105_01.9819.C4 |
| Gene No.    | 45772   | Strand  | -                   |
| Start       | 23186   | End     | 31325               |
| Name        | OJ990105_01.9819.C4.o6.np   | Method  | AAT/NAP             |
| Start       | 26496   | End     | 31325               |
| GI          | 6630685   | Score   | 1148                |
| Exons       | 26496..26551, 27967..29414, 29445..29661, 31254..31325                      |         |                     |
| GI Descrip. | (AP000969) Similar to copia-type pol polyprotein. (AF105716) [Oryza sativa] |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22009                      | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                      | Strand  | -                   |
| Start    | 23186                      | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o11.tw | Method  | TBLASTX:Wheat       |
| Start    | 28013                      | End     | 28354               |
| GI       | none                       | Score   | 92                  |
| Exons    | 28013..28174, 28211..28354 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22009                      | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                      | Strand  | -                   |
| Start    | 23186                      | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 28013                      | End     | 28381               |
| GI       | none                       | Score   | 68                  |
| Exons    | 28013..28381, 28091..28372 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772  | Strand  | -                   |
| Start    | 23186  | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o5.tm                              | Method  | TBLASTX:Maize       |
| Start    | 28013  | End     | 28355               |
| GI       | none   | Score   | 83                  |
| Exons    | 28013..28354, 28014..28163, 28067..28342, 28218..28355 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22009  | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772  | Strand  | -                   |
| Start    | 23186  | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o2.tm                              | Method  | TBLASTX:Maize       |
| Start    | 28423  | End     | 28862               |
| GI       | none   | Score   | 36                  |
| Exons    | 28423..28476, 28424..28861, 28484..28714, 28488..28862 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                     | Strand  | -                   |
| Start    | 23186                     | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o1.ts | Method  | TBLASTX:Soybean     |
| Start    | 28524                     | End     | 29133               |

GI 5509260 Score 390  
Exons 28524..29024, 28529..29011, 29011..29061, 29083..29133,  
29083..29133

GI Descrip. -

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22009   | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772   | Strand  | -                   |
| Start    | 23186   | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o5.tw   | Method  | TBLASTX:Wheat       |
| Start    | 28532   | End     | 29009               |
| GI       | none  | Score   | 96                  |
| Exons    | 28532..28711, 28538..28939, 28548..28718, 28740..28877,<br>28919..29008, 28920..29009 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22009                     | Seq. ID | OJ990105_01.9819.C4 |
| Gene No. | 45772                     | Strand  | -                   |
| Start    | 23186                     | End     | 31325               |
| Name     | OJ990105_01.9819.C4.o1.tc | Method  | TBLASTX:Cress       |
| Start    | 28643                     | End     | 28903               |
| GI       | none                      | Score   | 224                 |
| Exons    | 28643..28903              |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22010  | Seq. ID | OJ990105_01.9819.C5 |
| Gene No.    | 45773  | Strand  | -                   |
| Start       | 1  | End     | 3671                |
| Name        | OJ990105_01.9819.C5.o1.np                      | Method  | AAT/NAP             |
| Start       | 1  | End     | 3671                |
| GI          | 5091513  | Score   | 872                 |
| Exons       | 1..332, 1697..2376, 3209..3671                 |         |                     |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22010                     | Seq. ID | OJ990105_01.9819.C5 |
| Gene No. | 45773                     | Strand  | -                   |
| Start    | 1                         | End     | 3671                |
| Name     | OJ990105_01.9819.C5.o2.gs | Method  | GENSCAN             |
| Start    | 2969                      | End     | 3588                |
| GI       | none                      | Score   | .76                 |
| Exons    | 2969..3588                |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22011   | Seq. ID | OJ990105_01.9819.C6 |
| Gene No.    | 45774   | Strand  | +                   |
| Start       | 1   | End     | 5523                |
| Name        | OJ990105_01.9819.C6.o3.np                       | Method  | AAT/NAP             |
| Start       | 1   | End     | 5523                |
| GI          | 4680186   | Score   | 365                 |
| Exons       | 1..354, 3159..3210, 5323..5523                  |         |                     |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22011  | Seq. ID | OJ990105_01.9819.C6 |
| Gene No.    | 45775  | Strand  | -                   |
| Start       | 1  | End     | 5332                |
| Name        | OJ990105_01.9819.C6.o2.np                                | Method  | AAT/NAP             |
| Start       | 1  | End     | 2834                |
| GI          | 3645899  | Score   | 682                 |
| Exons       | 1..353, 1757..2834                                       |         |                     |
| GI Descrip. | (U68408) 5' end not determined experimentally [Zea mays] |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22011                              | Seq. ID | OJ990105_01.9819.C6 |
| Gene No. | 45775                              | Strand  | -                   |
| Start    | 1                                  | End     | 5332                |
| Name     | OJ990105_01.9819.C6.o1.gs          | Method  | GENSCAN             |
| Start    | 1680                               | End     | 5332                |
| GI       | none                               | Score   | .71                 |
| Exons    | 1680..2831, 4637..4702, 5288..5332 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22011  | Seq. ID | OJ990105_01.9819.C6 |
| Gene No. | 45776  | Strand  | -                   |
| Start    | 5262   | End     | 5456                |
| Name     | OJ990105_01.9819.C6.o1.tm                      | Method  | TBLASTX:Maize       |
| Start    | 1750   | End     | 2282                |
| GI       | none   | Score   | 199                 |
| Exons    | 1750..2055, 1758..2036, 2097..2282, 2098..2244 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22011                     | Seq. ID | OJ990105_01.9819.C6 |
| Gene No. | 45776                     | Strand  | -                   |
| Start    | 5262                      | End     | 5456                |
| Name     | OJ990105_01.9819.C6.o1.ts | Method  | TBLASTX:Soybean     |
| Start    | 1761                      | End     | 2009                |
| GI       | none                      | Score   | 120                 |
| Exons    | 1761..2009, 1819..1992    |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22011                              | Seq. ID | OJ990105_01.9819.C6 |
| Gene No. | 45776                              | Strand  | -                   |
| Start    | 5262                               | End     | 5456                |
| Name     | OJ990105_01.9819.C6.o1.tw          | Method  | TBLASTX:Wheat       |
| Start    | 1851                               | End     | 2138                |
| GI       | none                               | Score   | 143                 |
| Exons    | 1851..2138, 1852..2025, 1860..2030 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22011  | Seq. ID | OJ990105_01.9819.C6 |
| Gene No.    | 45776  | Strand  | -                   |
| Start       | 5262   | End     | 5456                |
| Name        | OJ990105_01.9819.C6.o1.gp  | Method  | AAT/GAP             |
| Start       | 5262   | End     | 5456                |
| GI          | uC-osflcyp033a04b1   | Score   | 340                 |
| Exons       | 5262..5456   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22011  | Seq. ID | OJ990105_01.9819.C6 |
| Gene No.    | 45776  | Strand  | -                   |
| Start       | 5262   | End     | 5456                |
| Name        | OJ990105_01.9819.C6.o2.gp  | Method  | AAT/GAP             |
| Start       | 5262   | End     | 5456                |
| GI          | uC-osflcyp033a04b1   | Score   | 339                 |
| Exons       | 5262..5456   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22012                     | Seq. ID | OJ990105_01.9819.C7 |
| Gene No. | 45777                     | Strand  | +                   |
| Start    | 276                       | End     | 710                 |
| Name     | OJ990105_01.9819.C7.o1.np | Method  | AAT/NAP             |
| Start    | 276                       | End     | 710                 |

GI 4680185 Score 413  
 Exons 276..710  
 GI Descrip. (AF111709) unknown [Oryza sativa subsp. indica]

Seq. No. 22012 Seq. ID OJ990105\_01.9819.C7  
 Gene No. 45777 Strand +  
 Start 276 End 710  
 Name OJ990105\_01.9819.C7.o1.gs Method GENSCAN  
 Start 315 End 635  
 GI none Score .87  
 Exons 315..635

Seq. No. 22012 Seq. ID OJ990105\_01.9819.C7  
 Gene No. 45778 Strand -  
 Start 1407 End 3207  
 Name OJ990105\_01.9819.C7.o2.gs Method GENSCAN  
 Start 1407 End 3207  
 GI none Score .58  
 Exons 1407..1507, 1647..1829, 2374..2638, 2751..2782, 3180..3207

Seq. No. 22013 Seq. ID OJ990105\_01.9819.C8  
 Gene No. 45779 Strand +  
 Start 867 End 983  
 Name OJ990105\_01.9819.C8.o1.gs Method GENSCAN  
 Start 867 End 983  
 GI none Score .8  
 Exons 867..983

Seq. No. 22014 Seq. ID OJ990105\_01.9819.C9  
 Gene No. 45780 Strand -  
 Start 1 End 1206  
 Name OJ990105\_01.9819.C9.o1.np Method AAT/NAP  
 Start 1 End 1206  
 GI 5091513 Score 441  
 Exons 1..86, 226..908, 961..1206  
 GI Descrip. (AB023482) Hypothetical protein [Oryza sativa]

Seq. No. 22014 Seq. ID OJ990105\_01.9819.C9  
 Gene No. 45780 Strand -  
 Start 1 End 1206  
 Name OJ990105\_01.9819.C9.o1.gs Method GENSCAN  
 Start 404 End 814  
 GI none Score .87  
 Exons 404..814

Seq. No. 22015 Seq. ID OJ990105\_01.9819.C11  
 Gene No. 45781 Strand +  
 Start 665 End 1023  
 Name OJ990105\_01.9819.C11.o1.tw Method TBLASTX:Wheat  
 Start 619 End 969  
 GI none Score 94  
 Exons 619..831, 832..969, 847..918, 903..962

Seq. No. 22015 Seq. ID OJ990105\_01.9819.C11  
 Gene No. 45781 Strand +  
 Start 665 End 1023  
 Name OJ990105\_01.9819.C11.o1.gs Method GENSCAN

|       |           |       |      |
|-------|-----------|-------|------|
| Start | 665       | End   | 1023 |
| GI    | none      | Score | .74  |
| Exons | 665..1023 |       |      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22016  | Seq. ID | OJ990105_01.9819.C12 |
| Gene No. | 45782  | Strand  | +                    |
| Start    | 9684   | End     | 19360                |
| Name     | OJ990105_01.9819.C12.o2.gs   | Method  | GENSCAN              |
| Start    | 9684   | End     | 13121                |
| GI       | none   | Score   | .75                  |
| Exons    | 9684..9879, 10281..10378, 10617..10822, 11763..11984, 12137..12200, 12403..12541, 13093..13121 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22016   | Seq. ID | OJ990105_01.9819.C12 |
| Gene No.    | 45782   | Strand  | +                    |
| Start       | 9684  | End     | 19360                |
| Name        | OJ990105_01.9819.C12.o4.np  | Method  | AAT/NAP              |
| Start       | 12885   | End     | 19287                |
| GI          | 4544372   | Score   | 1075                 |
| Exons       | 12885..12982, 15956..17153, 17214..17606, 17727..19287                  |         |                      |
| GI Descrip. | (AC006920) putative retroelement pol polyprotein [Arabidopsis thaliana] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22016   | Seq. ID | OJ990105_01.9819.C12 |
| Gene No.    | 45782   | Strand  | +                    |
| Start       | 9684  | End     | 19360                |
| Name        | OJ990105_01.9819.C12.o3.np  | Method  | AAT/NAP              |
| Start       | 15495   | End     | 19360                |
| GI          | 4417309   | Score   | 718                  |
| Exons       | 15495..16035, 16133..16279, 16457..17251, 17342..18018, 19316..19360    |         |                      |
| GI Descrip. | (AC006446) putative retroelement pol polyprotein [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22016  | Seq. ID | OJ990105_01.9819.C12 |
| Gene No.    | 45783  | Strand  | +                    |
| Start       | 20858  | End     | 22536                |
| Name        | OJ990105_01.9819.C12.o5.np                     | Method  | AAT/NAP              |
| Start       | 20858  | End     | 22536                |
| GI          | 6539588  | Score   | 322                  |
| Exons       | 20858..21171, 22474..22536                     |         |                      |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22016   | Seq. ID | OJ990105_01.9819.C12 |
| Gene No.    | 45784   | Strand  | -                    |
| Start       | 5257  | End     | 7015                 |
| Name        | OJ990105_01.9819.C12.o1.np  | Method  | AAT/NAP              |
| Start       | 5257  | End     | 7015                 |
| GI          | 6907087   | Score   | 919                  |
| Exons       | 5257..5353, 5892..6587, 6636..7015  |         |                      |
| GI Descrip. | (AP001129) ESTs C72771(E2215), AU082313(E2215) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22016 | Seq. ID | OJ990105_01.9819.C12 |
| Gene No. | 45785 | Strand  |                      |
| Start    | 15501 | End     | 15839                |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Name     | OJ990105_01.9819.C12.o4.ts   | Method  | TBLASTX:Soybean      |
| Start    | 15501  | End     | 15839                |
| GI       | none   | Score   | 189                  |
| Exons    | 15501..15839   |         |                      |
|          |  |         |                      |
| Seq. No. | 22016  | Seq. ID | OJ990105_01.9819.C12 |
| Gene No. | 45786  | Strand  |                      |
| Start    | 16411  | End     | 17297                |
| Name     | OJ990105_01.9819.C12.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 16411  | End     | 16812                |
| GI       | none   | Score   | 78                   |
| Exons    | 16411..16470, 16416..16469, 16451..16798, 16465..16812, 16467..16769, 16468..16797, 16712..16798 |         |                      |
|          |  |         |                      |
| Seq. No. | 22016  | Seq. ID | OJ990105_01.9819.C12 |
| Gene No. | 45786  | Strand  |                      |
| Start    | 16411  | End     | 17297                |
| Name     | OJ990105_01.9819.C12.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 16462  | End     | 16680                |
| GI       | none   | Score   | 260                  |
| Exons    | 16462..16680, 16467..16679   |         |                      |
|          |  |         |                      |
| Seq. No. | 22016  | Seq. ID | OJ990105_01.9819.C12 |
| Gene No. | 45786  | Strand  |                      |
| Start    | 16411  | End     | 17297                |
| Name     | OJ990105_01.9819.C12.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 16681  | End     | 17141                |
| GI       | none   | Score   | 324                  |
| Exons    | 16681..16917, 16681..16914, 16833..16916, 16894..17079, 16919..17104, 16922..17089, 17088..17141 |         |                      |
|          |  |         |                      |
| Seq. No. | 22016  | Seq. ID | OJ990105_01.9819.C12 |
| Gene No. | 45786  | Strand  |                      |
| Start    | 16411  | End     | 17297                |
| Name     | OJ990105_01.9819.C12.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 16828  | End     | 17297                |
| GI       | none   | Score   | 86                   |
| Exons    | 16828..16917, 16913..17092, 17109..17297, 17153..17284   |         |                      |
|          |  |         |                      |
| Seq. No. | 22016  | Seq. ID | OJ990105_01.9819.C12 |
| Gene No. | 45787  | Strand  |                      |
| Start    | 18223  | End     | 18684                |
| Name     | OJ990105_01.9819.C12.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 18223  | End     | 18504                |
| GI       | none   | Score   | 223                  |
| Exons    | 18223..18504   |         |                      |
|          |  |         |                      |
| Seq. No. | 22016  | Seq. ID | OJ990105_01.9819.C12 |
| Gene No. | 45787  | Strand  |                      |
| Start    | 18223  | End     | 18684                |
| Name     | OJ990105_01.9819.C12.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 18286  | End     | 18579                |
| GI       | none   | Score   | 133                  |
| Exons    | 18286..18450, 18475..18579   |         |                      |
|          |  |         |                      |
| Seq. No. | 22016  | Seq. ID | OJ990105_01.9819.C12 |
| Gene No. | 45787  | Strand  |                      |



Start 18223  
 Name OJ990105\_01.9819.C12.o3.tm  
 Start 18304  
 GI none  
 Exons 18304..18462, 18460..18684

End 18684  
 Method TBLASTX:Maize  
 End 18684  
 Score 80

Seq. No. 22016  
 Gene No. 45788  
 Start 18865  
 Name OJ990105\_01.9819.C12.o2.tw  
 Start 18865  
 GI none  
 Exons 18865..19272, 19008..19238

Seq. ID OJ990105\_01.9819.C12  
 Strand  
 End 19298  
 Method TBLASTX:Wheat  
 End 19272  
 Score 228

Seq. No. 22016  
 Gene No. 45788  
 Start 18865  
 Name OJ990105\_01.9819.C12.o1.ts  
 Start 19048  
 GI none  
 Exons 19048..19293, 19048..19215, 19059..19220, 19257..19298

Seq. ID OJ990105\_01.9819.C12  
 Strand  
 End 19298  
 Method TBLASTX:Soybean  
 End 19298  
 Score 247

Seq. No. 22017  
 Gene No. 45789  
 Start 1  
 Name OJ990105\_01.9819.C13.o1.np  
 Start 1  
 GI 6721517  
 Exons 1..1541

Seq. ID OJ990105\_01.9819.C13  
 Strand -  
 End 1541  
 Method AAT/NAP  
 End 1541  
 Score 1183

GI Descrip. (AP001072) Similar to polyprotein. (AF061282) [Oryza sativa]

Seq. No. 22017  
 Gene No. 45789  
 Start 1  
 Name OJ990105\_01.9819.C13.o2.tw  
 Start 195  
 GI none  
 Exons 195..437, 199..435, 225..437

Seq. ID OJ990105\_01.9819.C13  
 Strand -  
 End 1541  
 Method TBLASTX:Wheat  
 End 437  
 Score 175

Seq. No. 22017  
 Gene No. 45789  
 Start 1  
 Name OJ990105\_01.9819.C13.o1.ts  
 Start 201  
 GI none  
 Exons 201..509, 226..441, 369..509, 513..545, 514..543

Seq. ID OJ990105\_01.9819.C13  
 Strand -  
 End 1541  
 Method TBLASTX:Soybean  
 End 545  
 Score 114

Seq. No. 22017  
 Gene No. 45789  
 Start 1  
 Name OJ990105\_01.9819.C13.o1.gs  
 Start 342  
 GI none  
 Exons 342..797

Seq. ID OJ990105\_01.9819.C13  
 Strand -  
 End 1541  
 Method GENSCAN  
 End 797  
 Score .68

Seq. No. 22017  
 Gene No. 45789

Seq. ID OJ990105\_01.9819.C13  
 Strand -

Start 1  
 Name OJ990105\_01.9819.C13.o1.tm  
 Start 432  
 GI none  
 Exons 432..863, 439..633, 645..824

End 1541  
 Method TBLASTX:Maize  
 End 863  
 Score 74

Seq. No. 22017  
 Gene No. 45789  
 Start 1  
 Name OJ990105\_01.9819.C13.o1.tw  
 Start 486  
 GI none  
 Exons 486..863, 529..972, 918..968

Seq. ID OJ990105\_01.9819.C13  
 Strand -  
 End 1541  
 Method TBLASTX:Wheat  
 End 972  
 Score 253

Seq. No. 22018  
 Gene No. 45790  
 Start 593  
 Name OJ990105\_01.9819.C15.o1.gs  
 Start 593  
 GI none  
 Exons 593..692, 765..999

Seq. ID OJ990105\_01.9819.C15  
 Strand +  
 End 999  
 Method GENSCAN  
 End 999  
 Score .88

Seq. No. 22019  
 Gene No. 45791  
 Start 688  
 Name OJ990105\_01.9819.C17.o1.gs  
 Start 688  
 GI none  
 Exons 688..741, 838..1051

Seq. ID OJ990105\_01.9819.C17  
 Strand +  
 End 1051  
 Method GENSCAN  
 End 1051  
 Score .92

Seq. No. 22019  
 Gene No. 45791  
 Start 688  
 Name OJ990105\_01.9819.C17.o1.np  
 Start 838  
 GI 4680186  
 Exons 838..1039  
 GI Descrip. (AF111709) unknown [Oryza sativa subsp. indica]

Seq. ID OJ990105\_01.9819.C17  
 Strand +  
 End 1051  
 Method AAT/NAP  
 End 1039  
 Score 306

Seq. No. 22019  
 Gene No. 45792  
 Start 590  
 Name OJ990105\_01.9819.C17.o1.gp  
 Start 590  
 GI uC-osflcyp033a04b1  
 Exons 590..972  
 GI Descrip. '6016845/dbj|AP000570.1|AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10'

Seq. ID OJ990105\_01.9819.C17  
 Strand -  
 End 972  
 Method AAT/GAP  
 End 972  
 Score 660

Seq. No. 22019  
 Gene No. 45793  
 Start 1401  
 Name OJ990105\_01.9819.C17.o2.gs  
 Start 1401  
 GI none  
 Exons 1401..1486, 1814..1862

Seq. ID OJ990105\_01.9819.C17  
 Strand -  
 End 1862  
 Method GENSCAN  
 End 1862  
 Score .73

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22020   | Seq. ID | OJ990105_01.9819.C18 |
| Gene No.    | 45794   | Strand  | -                    |
| Start       | 1   | End     | 1457                 |
| Name        | OJ990105_01.9819.C18.o1.np                          | Method  | AAT/NAP              |
| Start       | 1   | End     | 1457                 |
| GI          | 4680179   | Score   | 687                  |
| Exons       | 1..22, 200..490, 524..1457                          |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22020                      | Seq. ID | OJ990105_01.9819.C18 |
| Gene No. | 45794                      | Strand  | -                    |
| Start    | 1                          | End     | 1457                 |
| Name     | OJ990105_01.9819.C18.o1.gs | Method  | GENSCAN              |
| Start    | 412                        | End     | 997                  |
| GI       | none                       | Score   | .58                  |
| Exons    | 412..622, 794..997         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22020                      | Seq. ID | OJ990105_01.9819.C18 |
| Gene No. | 45794                      | Strand  | -                    |
| Start    | 1                          | End     | 1457                 |
| Name     | OJ990105_01.9819.C18.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 782                        | End     | 1024                 |
| GI       | none                       | Score   | 173                  |
| Exons    | 782..1024                  |         |                      |

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 22020                             | Seq. ID | OJ990105_01.9819.C18 |
| Gene No. | 45794                             | Strand  | -                    |
| Start    | 1                                 | End     | 1457                 |
| Name     | OJ990105_01.9819.C18.o1.tm        | Method  | TBLASTX:Maize        |
| Start    | 827                               | End     | 1128                 |
| GI       | none                              | Score   | 72                   |
| Exons    | 827..1018, 1034..1117, 1036..1128 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22020                              | Seq. ID | OJ990105_01.9819.C18 |
| Gene No. | 45794                              | Strand  | -                    |
| Start    | 1                                  | End     | 1457                 |
| Name     | OJ990105_01.9819.C18.o1.tw         | Method  | TBLASTX:Wheat        |
| Start    | 1033                               | End     | 1344                 |
| GI       | none                               | Score   | 41                   |
| Exons    | 1033..1344, 1034..1111, 1166..1342 |         |                      |

|             |                                    |         |                      |
|-------------|------------------------------------|---------|----------------------|
| Seq. No.    | 22021                              | Seq. ID | OJ990105_01.9819.C19 |
| Gene No.    | 45795                              | Strand  | +                    |
| Start       | 1                                  | End     | 175                  |
| Name        | OJ990105_01.9819.C19.o1.np         | Method  | AAT/NAP              |
| Start       | 1                                  | End     | 175                  |
| GI          | 3192686                            | Score   | 216                  |
| Exons       | 1..175                             |         |                      |
| GI Descrip. | (AF064539) gp3 [Bacteriophage N15] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22021                      | Seq. ID | OJ990105_01.9819.C19 |
| Gene No. | 45796                      | Strand  | +                    |
| Start    | 131                        | End     | 1169                 |
| Name     | OJ990105_01.9819.C19.o1.gs | Method  | GENSCAN              |
| Start    | 131                        | End     | 987                  |
| GI       | none                       | Score   | .82                  |
| Exons    | 131..987                   |         |                      |

|             |                                    |         |                      |
|-------------|------------------------------------|---------|----------------------|
| Seq. No.    | 22021                              | Seq. ID | OJ990105_01.9819.C19 |
| Gene No.    | 45796                              | Strand  | +                    |
| Start       | 131                                | End     | 1169                 |
| Name        | OJ990105_01.9819.C19.o2.np         | Method  | AAT/NAP              |
| Start       | 175                                | End     | 1169                 |
| GI          | 3192687                            | Score   | 1455                 |
| Exons       | 175..1169                          |         |                      |
| GI Descrip. | (AF064539) gp4 [Bacteriophage N15] |         |                      |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22022  | Seq. ID | OJ990105_08.9819.C1 |
| Gene No.    | 45797  | Strand  | +                   |
| Start       | 1  | End     | 1144                |
| Name        | OJ990105_08.9819.C1.o1.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 1141                |
| GI          | 6907087  | Score   | 193                 |
| Exons       | 1..50, 212..500, 1040..1141  |         |                     |
| GI Descrip. | (AP001129) ESTs C72771(E2215),AU082313(E2215) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22022                     | Seq. ID | OJ990105_08.9819.C1 |
| Gene No. | 45797                     | Strand  | +                   |
| Start    | 1                         | End     | 1144                |
| Name     | OJ990105_08.9819.C1.o1.gs | Method  | GENSCAN             |
| Start    | 396                       | End     | 1144                |
| GI       | none                      | Score   | .66                 |
| Exons    | 396..500, 1040..1144      |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22022  | Seq. ID | OJ990105_08.9819.C1 |
| Gene No.    | 45798  | Strand  | +                   |
| Start       | 1607   | End     | 1979                |
| Name        | OJ990105_08.9819.C1.o1.gp  | Method  | AAT/GAP             |
| Start       | 1607   | End     | 1979                |
| GI          | uC-osflcyp033a04b1   | Score   | 510                 |
| Exons       | 1607..1979   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22022  | Seq. ID | OJ990105_08.9819.C1 |
| Gene No.    | 45799  | Strand  | -                   |
| Start       | 132  | End     | 4304                |
| Name        | OJ990105_08.9819.C1.o3.np  | Method  | AAT/NAP             |
| Start       | 132  | End     | 3993                |
| GI          | 1076814  | Score   | 588                 |
| Exons       | 132..220, 2684..3046, 3890..3993   |         |                     |
| GI Descrip. | maturase-related protein - maize (fragment) gi 840925 (U09987) maturase-related protein [Zea mays] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22022   | Seq. ID | OJ990105_08.9819.C1 |
| Gene No.    | 45799   | Strand  | -                   |
| Start       | 132   | End     | 4304                |
| Name        | OJ990105_08.9819.C1.o2.np                       | Method  | AAT/NAP             |
| Start       | 1535  | End     | 3490                |
| GI          | 4680186   | Score   | 212                 |
| Exons       | 1535..1740, 3466..3490                          |         |                     |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica] |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22022                              | Seq. ID | OJ990105_08.9819.C1 |
| Gene No. | 45799                              | Strand  | -                   |
| Start    | 132                                | End     | 4304                |
| Name     | OJ990105_08.9819.C1.o2.gs          | Method  | GENSCAN             |
| Start    | 2647                               | End     | 4304                |
| GI       | none                               | Score   | .41                 |
| Exons    | 2647..2762, 2817..3065, 4229..4304 |         |                     |

|             |                                |         |                     |
|-------------|--------------------------------|---------|---------------------|
| Seq. No.    | 22023                          | Seq. ID | OJ990105_08.9819.C2 |
| Gene No.    | 45800                          | Strand  | +                   |
| Start       | 706                            | End     | 933                 |
| Name        | OJ990105_08.9819.C2.o1.np      | Method  | AAT/NAP             |
| Start       | 706                            | End     | 933                 |
| GI          | 769717                         | Score   | 388                 |
| Exons       | 706..933                       |         |                     |
| GI Descrip. | (D32052) ORF76B [Oryza sativa] |         |                     |

|             |                               |         |                     |
|-------------|-------------------------------|---------|---------------------|
| Seq. No.    | 22023                         | Seq. ID | OJ990105_08.9819.C2 |
| Gene No.    | 45801                         | Strand  | +                   |
| Start       | 1181                          | End     | 1429                |
| Name        | OJ990105_08.9819.C2.o2.np     | Method  | AAT/NAP             |
| Start       | 1181                          | End     | 1429                |
| GI          | 769718                        | Score   | 427                 |
| Exons       | 1181..1429                    |         |                     |
| GI Descrip. | (D32052) ORF83 [Oryza sativa] |         |                     |

|             |                               |         |                     |
|-------------|-------------------------------|---------|---------------------|
| Seq. No.    | 22023                         | Seq. ID | OJ990105_08.9819.C2 |
| Gene No.    | 45802                         | Strand  | +                   |
| Start       | 1745                          | End     | 2017                |
| Name        | OJ990105_08.9819.C2.o3.np     | Method  | AAT/NAP             |
| Start       | 1745                          | End     | 2017                |
| GI          | 769719                        | Score   | 459                 |
| Exons       | 1745..2017                    |         |                     |
| GI Descrip. | (D32052) ORF91 [Oryza sativa] |         |                     |

|             |                                |         |                     |
|-------------|--------------------------------|---------|---------------------|
| Seq. No.    | 22023                          | Seq. ID | OJ990105_08.9819.C2 |
| Gene No.    | 45803                          | Strand  | +                   |
| Start       | 4374                           | End     | 5575                |
| Name        | OJ990105_08.9819.C2.o5.np      | Method  | AAT/NAP             |
| Start       | 4374                           | End     | 5575                |
| GI          | 769721                         | Score   | 1600                |
| Exons       | 4374..5575                     |         |                     |
| GI Descrip. | (D32052) ORF483 [Oryza sativa] |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22023   | Seq. ID | OJ990105_08.9819.C2 |
| Gene No. | 45804   | Strand  | -                   |
| Start    | 308   | End     | 4676                |
| Name     | OJ990105_08.9819.C2.o1.gs   | Method  | GENSCAN             |
| Start    | 308   | End     | 4676                |
| GI       | none  | Score   | .8                  |
| Exons    | 308..555, 839..1028, 2757..2806, 3115..3172, 3368..3463, 4674..4676 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22023 | Seq. ID | OJ990105_08.9819.C2 |
| Gene No. | 45804 | Strand  | -                   |
| Start    | 308   | End     | 4676                |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Name        | OJ990105_08.9819.C2.o4.np                                  | Method  | AAT/NAP             |
| Start       | 2620   | End     | 2868                |
| GI          | 769720   | Score   | 420                 |
| Exons       | 2620..2868   |         |                     |
| GI Descrip. | (D32052) ORF83B [Oryza sativa]                             |         |                     |
|             |  |         |                     |
| Seq. No.    | 22023  | Seq. ID | OJ990105_08.9819.C2 |
| Gene No.    | 45805  | Strand  |                     |
| Start       | 4596   | End     | 5174                |
| Name        | OJ990105_08.9819.C2.o1.tc                                  | Method  | TBLASTX:Cress       |
| Start       | 4596   | End     | 5174                |
| GI          | none   | Score   | 60                  |
| Exons       | 4596..4673, 4652..4765, 4653..4826, 4874..5140, 4875..5174 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22024  | Seq. ID | OJ990105_08.9819.C3 |
| Gene No.    | 45806  | Strand  | +                   |
| Start       | 157  | End     | 719                 |
| Name        | OJ990105_08.9819.C3.o1.np                                  | Method  | AAT/NAP             |
| Start       | 157  | End     | 719                 |
| GI          | 769721   | Score   | 562                 |
| Exons       | 157..719   |         |                     |
| GI Descrip. | (D32052) ORF483 [Oryza sativa]                             |         |                     |
|             |  |         |                     |
| Seq. No.    | 22024  | Seq. ID | OJ990105_08.9819.C3 |
| Gene No.    | 45807  | Strand  | +                   |
| Start       | 2881   | End     | 3529                |
| Name        | OJ990105_08.9819.C3.o2.np                                  | Method  | AAT/NAP             |
| Start       | 2881   | End     | 3529                |
| GI          | 769722   | Score   | 415                 |
| Exons       | 2881..3529   |         |                     |
| GI Descrip. | (D32052) ORF224 [Oryza sativa]                             |         |                     |
|             |  |         |                     |
| Seq. No.    | 22024  | Seq. ID | OJ990105_08.9819.C3 |
| Gene No.    | 45808  | Strand  | -                   |
| Start       | 2503   | End     | 2676                |
| Name        | OJ990105_08.9819.C3.o1.gs                                  | Method  | GENSCAN             |
| Start       | 2503   | End     | 2676                |
| GI          | none   | Score   | .98                 |
| Exons       | 2503..2676   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22025  | Seq. ID | OJ990105_08.9819.C6 |
| Gene No.    | 45809  | Strand  | +                   |
| Start       | 1833   | End     | 5043                |
| Name        | OJ990105_08.9819.C6.o2.gs                                  | Method  | GENSCAN             |
| Start       | 1833   | End     | 5043                |
| GI          | none   | Score   | .67                 |
| Exons       | 1833..1860, 3846..4056, 4290..4430, 4505..4616, 4900..5043 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22025  | Seq. ID | OJ990105_08.9819.C6 |
| Gene No.    | 45810  | Strand  | -                   |
| Start       | 3773   | End     | 9914                |
| Name        | OJ990105_08.9819.C6.o1.np                                  | Method  | AAT/NAP             |
| Start       | 3773   | End     | 4597                |
| GI          | 3980178  | Score   | 1145                |
| Exons       | 3773..4597   |         |                     |
| GI Descrip. | (X72616) ORFx [Arabidopsis thaliana]                       |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22025   | Seq. ID | OJ990105_08.9819.C6 |
| Gene No.    | 45810   | Strand  | -                   |
| Start       | 3773  | End     | 9914                |
| Name        | OJ990105_08.9819.C6.o2.np   | Method  | AAT/NAP             |
| Start       | 3790  | End     | 9914                |
| GI          | 2583130   | Score   | 67                  |
| Exons       | 3790..3833, 6836..6997, 9876..9914  |         |                     |
| GI Descrip. | (AC002387) putative non-LTR retroelement reverse transcriptase [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22025                     | Seq. ID | OJ990105_08.9819.C6 |
| Gene No. | 45810                     | Strand  | -                   |
| Start    | 3773                      | End     | 9914                |
| Name     | OJ990105_08.9819.C6.o1.gp | Method  | AAT/GAP             |
| Start    | 4517                      | End     | 4869                |
| GI       | 427699                    | Score   | 602                 |
| Exons    | 4517..4869                |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22025  | Seq. ID | OJ990105_08.9819.C6 |
| Gene No. | 45811  | Strand  | -                   |
| Start    | 10383  | End     | 10678               |
| Name     | OJ990105_08.9819.C6.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 4601   | End     | 4777                |
| GI       | none   | Score   | 45                  |
| Exons    | 4601..4639, 4602..4640, 4622..4747, 4628..4747, 4629..4754, 4651..4761, 4744..4776, 4751..4777 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22025   | Seq. ID | OJ990105_08.9819.C6 |
| Gene No.    | 45811   | Strand  | -                   |
| Start       | 10383   | End     | 10678               |
| Name        | OJ990105_08.9819.C6.o3.np                       | Method  | AAT/NAP             |
| Start       | 10383   | End     | 10678               |
| GI          | 485862  | Score   | 423                 |
| Exons       | 10383..10678                                    |         |                     |
| GI Descrip. | (X75036) NADH dehydrogenase [Triticum aestivum] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22026   | Seq. ID | OJ990105_08.9819.C7 |
| Gene No.    | 45812   | Strand  | -                   |
| Start       | 131   | End     | 2421                |
| Name        | OJ990105_08.9819.C7.o1.np                       | Method  | AAT/NAP             |
| Start       | 131   | End     | 1636                |
| GI          | 485862  | Score   | 382                 |
| Exons       | 131..151, 1390..1636                            |         |                     |
| GI Descrip. | (X75036) NADH dehydrogenase [Triticum aestivum] |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22026   | Seq. ID | OJ990105_08.9819.C7 |
| Gene No. | 45812   | Strand  | -                   |
| Start    | 131   | End     | 2421                |
| Name     | OJ990105_08.9819.C7.o1.gs                     | Method  | GENSCAN             |
| Start    | 706   | End     | 2421                |
| GI       | none  | Score   | .7                  |
| Exons    | 706..1014, 1439..1561, 1968..1999, 2267..2421 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22027                     | Seq. ID | OJ990105_08.9819.C8 |
| Gene No. | 45813                     | Strand  | +                   |
| Start    | 633                       | End     | 2971                |
| Name     | OJ990105_08.9819.C8.o1.gs | Method  | GENSCAN             |

|       |  |       |      |
|-------|--|-------|------|
| Start | 633  | End   | 2971 |
| GI    | none   | Score | .76  |
| Exons | 633..767, 1309..1431, 2384..2466, 2570..2661, 2739..2971 |       |      |

  

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22027  | Seq. ID | OJ990105_08.9819.C8 |
| Gene No.    | 45814  | Strand  | +                   |
| Start       | 6157   | End     | 6222                |
| Name        | OJ990105_08.9819.C8.o2.gp  | Method  | AAT/GAP             |
| Start       | 6157   | End     | 6222                |
| GI          | 5607623  | Score   | 82                  |
| Exons       | 6157..6222   |         |                     |
| GI Descrip. | 287391/dbj D13111 RICMT15 2.0e-27 Oryza sativa mitochondrial rpoB pseudogene |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22027   | Seq. ID | OJ990105_08.9819.C8 |
| Gene No.    | 45815   | Strand  | -                   |
| Start       | 170   | End     | 3002                |
| Name        | OJ990105_08.9819.C8.o1.np                       | Method  | AAT/NAP             |
| Start       | 170   | End     | 3002                |
| GI          | 485862  | Score   | 1073                |
| Exons       | 170..666, 1977..2045, 2860..3002                |         |                     |
| GI Descrip. | (X75036) NADH dehydrogenase [Triticum aestivum] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22027  | Seq. ID | OJ990105_08.9819.C8 |
| Gene No.    | 45815  | Strand  | -                   |
| Start       | 170  | End     | 3002                |
| Name        | OJ990105_08.9819.C8.o1.gp  | Method  | AAT/GAP             |
| Start       | 2452   | End     | 2850                |
| GI          | 2311928  | Score   | 681                 |
| Exons       | 2452..2850   |         |                     |
| GI Descrip. | 485861/emb X75036 TADNANAD7 1.0e-155 T.aestivum mitochondrial nad7 gene for NADH dehydrogenase subunit |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22027                              | Seq. ID | OJ990105_08.9819.C8 |
| Gene No. | 45816                              | Strand  | -                   |
| Start    | 3178                               | End     | 4501                |
| Name     | OJ990105_08.9819.C8.o2.gs          | Method  | GENSCAN             |
| Start    | 3178                               | End     | 4501                |
| GI       | none                               | Score   | .72                 |
| Exons    | 3178..3258, 3917..4063, 4451..4501 |         |                     |

|          |                                |         |                     |
|----------|--------------------------------|---------|---------------------|
| Seq. No. | 22027                          | Seq. ID | OJ990105_08.9819.C8 |
| Gene No. | 45817                          | Strand  | -                   |
| Start    | 7057                           | End     | 9482                |
| Name     | OJ990105_08.9819.C8.o1.ts      | Method  | TBLASTX:Soybean     |
| Start    | 204                            | End     | 2963                |
| GI       | none                           | Score   | 86                  |
| Exons    | 204..665, 367..621, 2823..2963 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22027  | Seq. ID | OJ990105_08.9819.C8 |
| Gene No.    | 45817  | Strand  | -                   |
| Start       | 7057   | End     | 9482                |
| Name        | OJ990105_08.9819.C8.o2.np                                    | Method  | AAT/NAP             |
| Start       | 5189   | End     | 5618                |
| GI          | 82638  | Score   | 725                 |
| Exons       | 5189..5618   |         |                     |
| GI Descrip. | hypothetical 16K protein (nad5 intron) - wheat mitochondrion |         |                     |



|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22027  | Seq. ID | OJ990105_08.9819.C8 |
| Gene No. | 45817  | Strand  | -                   |
| Start    | 7057   | End     | 9482                |
| Name     | OJ990105_08.9819.C8.o1.tc                      | Method  | TBLASTX:Cress       |
| Start    | 6068   | End     | 6338                |
| GI       | none   | Score   | 374                 |
| Exons    | 6068..6328, 6068..6325, 6069..6338, 6070..6327 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22027   | Seq. ID | OJ990105_08.9819.C8 |
| Gene No.    | 45817   | Strand  | -                   |
| Start       | 7057  | End     | 9482                |
| Name        | OJ990105_08.9819.C8.o3.np                       | Method  | AAT/NAP             |
| Start       | 6073  | End     | 6382                |
| GI          | 1076815   | Score   | 439                 |
| Exons       | 6073..6382                                      |         |                     |
| GI Descrip. | NADH dehydrogenase subunit I - maize (fragment) |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22027   | Seq. ID | OJ990105_08.9819.C8 |
| Gene No.    | 45817   | Strand  | -                   |
| Start       | 7057  | End     | 9482                |
| Name        | OJ990105_08.9819.C8.o4.np   | Method  | AAT/NAP             |
| Start       | 6850  | End     | 9482                |
| GI          | 82640   | Score   | 2597                |
| Exons       | 6850..8421, 9438..9482  |         |                     |
| GI Descrip. | maturase-related protein (nad1 intron) - wheat mitochondrion<br>gi 1334611 emb CAA41033  (X57965) initiation unknown [Triticum<br>aestivum] |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22027                              | Seq. ID | OJ990105_08.9819.C8 |
| Gene No. | 45817                              | Strand  | -                   |
| Start    | 7057                               | End     | 9482                |
| Name     | OJ990105_08.9819.C8.o3.gs          | Method  | GENSCAN             |
| Start    | 7057                               | End     | 9228                |
| GI       | none                               | Score   | .55                 |
| Exons    | 7057..7924, 7985..8186, 9225..9228 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22027                     | Seq. ID | OJ990105_08.9819.C8 |
| Gene No. | 45817                     | Strand  | -                   |
| Start    | 7057                      | End     | 9482                |
| Name     | OJ990105_08.9819.C8.o1.tw | Method  | TBLASTX:Wheat       |
| Start    | 7075                      | End     | 7482                |
| GI       | none                      | Score   | 567                 |
| Exons    | 7075..7482, 7076..7480    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22028                     | Seq. ID | OJ990105_08.9819.C9 |
| Gene No. | 45818                     | Strand  | +                   |
| Start    | 347                       | End     | 1188                |
| Name     | OJ990105_08.9819.C9.o1.gs | Method  | GENSCAN             |
| Start    | 347                       | End     | 1188                |
| GI       | none                      | Score   | .64                 |
| Exons    | 347..1188                 |         |                     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22029                      | Seq. ID | OJ990105_08.9819.C10 |
| Gene No. | 45819                      | Strand  | +                    |
| Start    | 210                        | End     | 1514                 |
| Name     | OJ990105_08.9819.C10.o1.gs | Method  | GENSCAN              |

Start 210  
GI none  
Exons 210..278, 1093..1443

End 1443  
Score .65

Seq. No. 22029  
Gene No. 45819  
Start 210  
Name OJ990105\_08.9819.C10.o1.np  
Start 1072  
GI 4680179  
Exons 1072..1514  
GI Descrip. (AF111709) polyprotein [Oryza sativa subsp. indica]

Seq. ID OJ990105\_08.9819.C10  
Strand +  
End 1514  
Method AAT/NAP  
End 1514  
Score 231

Seq. No. 22029  
Gene No. 45819  
Start 210  
Name OJ990105\_08.9819.C10.o1.tw  
Start 1318  
GI none  
Exons 1318..1509, 1329..1493

Seq. ID OJ990105\_08.9819.C10  
Strand +  
End 1514  
Method TBLASTX:Wheat  
End 1509  
Score 185

Seq. No. 22030  
Gene No. 45820  
Start 47  
Name OJ990105\_08.9819.C11.o1.np  
Start 47  
GI 119714  
Exons 47..222, 1820..2328  
GI Descrip. EXTENSIN PRECURSOR (CELL WALL HYDROXYPROLINE-RICH GLYCOPROTEIN)  
gi|82169|pir|S06733 hydroxyproline-rich glycoprotein precursor  
- common tobacco gi|19867|emb|CAA32090| (X13885) extensin (AA  
1-620) [Nicotiana tabacum]

Seq. ID OJ990105\_08.9819.C11  
Strand +  
End 2328  
Method AAT/NAP  
End 2328  
Score 149

Seq. No. 22031  
Gene No. 45821  
Start 905  
Name OJ990105\_08.9819.C12.o1.gs  
Start 905  
GI none  
Exons 905..1117

Seq. ID OJ990105\_08.9819.C12  
Strand -  
End 1117  
Method GENSCAN  
End 1117  
Score .57

Seq. No. 22032  
Gene No. 45822  
Start 755  
Name OJ990105\_08.9819.C13.o1.gs  
Start 755  
GI none  
Exons 755..821

Seq. ID OJ990105\_08.9819.C13  
Strand -  
End 821  
Method GENSCAN  
End 821  
Score .69

Seq. No. 22033  
Gene No. 45823  
Start 1127  
Name OJ990105\_08.9819.C14.o1.np  
Start 403  
GI 6063554  
Exons 403..577  
GI Descrip. (AP000615) ESTs AU075609(C63344), C71850(E0464), C98611(E0464)

Seq. ID OJ990105\_08.9819.C14  
Strand -  
End 1224  
Method AAT/NAP  
End 577  
Score 104

correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22033                      | Seq. ID | OJ990105_08.9819.C14 |
| Gene No. | 45823                      | Strand  | -                    |
| Start    | 1127                       | End     | 1224                 |
| Name     | OJ990105_08.9819.C14.o1.gs | Method  | GENSCAN              |
| Start    | 1127                       | End     | 1224                 |
| GI       | none                       | Score   | .43                  |
| Exons    | 1127..1224                 |         |                      |

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 22034                             | Seq. ID | OJ990105_08.9819.C19 |
| Gene No. | 45824                             | Strand  | +                    |
| Start    | 986                               | End     | 3079                 |
| Name     | OJ990105_08.9819.C19.o1.gs        | Method  | GENSCAN              |
| Start    | 986                               | End     | 3079                 |
| GI       | none                              | Score   | .79                  |
| Exons    | 986..1037, 2606..2754, 2878..3079 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22035                      | Seq. ID | OJ990105_08.9819.C20 |
| Gene No. | 45825                      | Strand  | +                    |
| Start    | 711                        | End     | 1545                 |
| Name     | OJ990105_08.9819.C20.o1.gs | Method  | GENSCAN              |
| Start    | 711                        | End     | 1545                 |
| GI       | none                       | Score   | .55                  |
| Exons    | 711..726, 1331..1545       |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22035                      | Seq. ID | OJ990105_08.9819.C20 |
| Gene No. | 45826                      | Strand  | -                    |
| Start    | 2158                       | End     | 3263                 |
| Name     | OJ990105_08.9819.C20.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 624                        | End     | 972                  |
| GI       | none                       | Score   | 177                  |
| Exons    | 624..971, 628..972         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22035                      | Seq. ID | OJ990105_08.9819.C20 |
| Gene No. | 45826                      | Strand  | -                    |
| Start    | 2158                       | End     | 3263                 |
| Name     | OJ990105_08.9819.C20.o2.gs | Method  | GENSCAN              |
| Start    | 2158                       | End     | 3263                 |
| GI       | none                       | Score   | .77                  |
| Exons    | 2158..2753, 3254..3263     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22036                      | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45827                      | Strand  | +                    |
| Start    | 1003                       | End     | 1860                 |
| Name     | OJ990105_08.9819.C21.o1.gs | Method  | GENSCAN              |
| Start    | 1003                       | End     | 1843                 |
| GI       | none                       | Score   | .77                  |
| Exons    | 1003..1064, 1627..1843     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22036                      | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45827                      | Strand  | +                    |
| Start    | 1003                       | End     | 1860                 |
| Name     | OJ990105_08.9819.C21.o1.np | Method  | AAT/NAP              |
| Start    | 1190                       | End     | 1860                 |
| GI       | 769722                     | Score   | 1152                 |

Exons 1190..1860  
GI Descrip. (D32052) ORF224 [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22036                      | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45828                      | Strand  | +                    |
| Start    | 1936                       | End     | 2211                 |
| Name     | OJ990105_08.9819.C21.o2.np | Method  | AAT/NAP              |
| Start    | 1936                       | End     | 2211                 |
| GI       | 769724                     | Score   | 481                  |

Exons 1936..2211  
GI Descrip. (D32052) ORF92B [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22036                      | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45829                      | Strand  | +                    |
| Start    | 3486                       | End     | 3921                 |
| Name     | OJ990105_08.9819.C21.o2.gs | Method  | GENSCAN              |
| Start    | 3486                       | End     | 3921                 |
| GI       | none                       | Score   | .73                  |
| Exons    | 3486..3563, 3838..3921     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22036  | Seq. ID | OJ990105_08.9819.C21 |
| Gene No.    | 45830  | Strand  | +                    |
| Start       | 10848  | End     | 14758                |
| Name        | OJ990105_08.9819.C21.o7.np                   | Method  | AAT/NAP              |
| Start       | 10848  | End     | 14758                |
| GI          | 5902444                                      | Score   | 867                  |
| Exons       | 10848..10943, 13915..14758                   |         |                      |
| GI Descrip. | (AB030283). GAG-POL precursor [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22036   | Seq. ID | OJ990105_08.9819.C21 |
| Gene No.    | 45831   | Strand  | -                    |
| Start       | 1785  | End     | 2207                 |
| Name        | OJ990105_08.9819.C21.o1.gp                                      | Method  | AAT/GAP              |
| Start       | 1785  | End     | 2207                 |
| GI          | uC-osflcyp099h10a1  | Score   | 746                  |
| Exons       | 1785..2207  |         |                      |
| GI Descrip. | '769724/dbj BAA06828.1  3.0e-27 (D32052) ORF92B [Oryza sativa]' |         |                      |

|             |                                |         |                      |
|-------------|--------------------------------|---------|----------------------|
| Seq. No.    | 22036                          | Seq. ID | OJ990105_08.9819.C21 |
| Gene No.    | 45832                          | Strand  | -                    |
| Start       | 3477                           | End     | 3884                 |
| Name        | OJ990105_08.9819.C21.o3.np     | Method  | AAT/NAP              |
| Start       | 3477                           | End     | 3884                 |
| GI          | 769725                         | Score   | 745                  |
| Exons       | 3477..3884                     |         |                      |
| GI Descrip. | (D32052) ORF136 [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22036  | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45833  | Strand  | -                    |
| Start    | 4859   | End     | 7301                 |
| Name     | OJ990105_08.9819.C21.o3.gs                     | Method  | GENSCAN              |
| Start    | 4859   | End     | 7273                 |
| GI       | none   | Score   | .96                  |
| Exons    | 4859..4995, 5055..5076, 5258..5296, 7154..7273 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22036 | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45833 | Strand  | -                    |

|             |   |        |         |
|-------------|---|--------|---------|
| Start       | 4859  | End    | 7301    |
| Name        | OJ990105_08.9819.C21.o4.np  | Method | AAT/NAP |
| Start       | 6927  | End    | 7301    |
| GI          | 134056  | Score  | 654     |
| Exons       | 6927..7301  |        |         |
| GI Descrip. | MITOCHONDRIAL RIBOSOMAL PROTEIN S12 gi 100721 pir  S17913<br>ribosomal protein S12 - rice mitochondrion<br>gi 769727 dbj BAA06831.1  (D32052) ribosomal protein S12 [Oryza<br>sativa] gi 769735 dbj BAA04795  (D21251) ribosomal protein S12<br>[Oryza sativa] gi 870717 (M57904) ribosomal protein S12 [Oryza<br>sativa] |        |         |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22036  | Seq. ID | OJ990105_08.9819.C21 |
| Gene No.    | 45834  | Strand  | -                    |
| Start       | 7349   | End     | 7813                 |
| Name        | OJ990105_08.9819.C21.o5.np   | Method  | AAT/NAP              |
| Start       | 7349   | End     | 7813                 |
| GI          | 100719   | Score   | 808                  |
| Exons       | 7349..7813   |         |                      |
| GI Descrip. | NADH dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 3 - rice<br>mitochondrion gi 769728 dbj BAA06832.1  (D32052) NADH<br>dehydrogenase subunit 3 [Oryza sativa] gi 769734 dbj BAA04794 <br>(D21251) NADH dehydrogenase subunit 3 [Oryza sativa] gi 870716<br>(M57904) Nad3 protein [Oryza sativa] |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22036                              | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45835                              | Strand  | -                    |
| Start    | 7939                               | End     | 8014                 |
| Name     | OJ990105_08.9819.C21.o1.tw         | Method  | TBLASTX:Wheat        |
| Start    | 6916                               | End     | 7191                 |
| GI       | none                               | Score   | 225                  |
| Exons    | 6916..7191, 6933..7190, 6935..7111 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22036                      | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45835                      | Strand  | -                    |
| Start    | 7939                       | End     | 8014                 |
| Name     | OJ990105_08.9819.C21.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 6922                       | End     | 7301                 |
| GI       | none                       | Score   | 240                  |
| Exons    | 6922..7224, 6933..7301     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22036                      | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45835                      | Strand  | -                    |
| Start    | 7939                       | End     | 8014                 |
| Name     | OJ990105_08.9819.C21.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 6927                       | End     | 7289                 |
| GI       | none                       | Score   | 257                  |
| Exons    | 6927..7289, 6928..7224     |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22036   | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45835   | Strand  | -                    |
| Start    | 7939  | End     | 8014                 |
| Name     | OJ990105_08.9819.C21.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 7244  | End     | 7640                 |
| GI       | 4397510   | Score   | 115                  |
| Exons    | 7244..7639, 7248..7328, 7249..7329, 7318..7638, 7355..7639,<br>7497..7640 |         |                      |

GI Descrip. 2147784/pir\_S71081 4.0e-53 NADH dehydrogenase chain 3 - onion mitochondrion >gi\_1518344\_emb\_CAA89850\_ (Z49772) NADH dehydrogenase subunit 3 [Allium cepa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22036                      | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45835                      | Strand  | -                    |
| Start    | 7939                       | End     | 8014                 |
| Name     | OJ990105_08.9819.C21.o6.np | Method  | AAT/NAP              |
| Start    | 7939                       | End     | 8014                 |
| GI       | 266533                     | Score   | 83                   |
| Exons    | 7939..8014                 |         |                      |

GI Descrip. MITOCHONDRIAL 22 KD PROTEIN (ORF 25) gi|283013|pir||S26876 hypothetical protein 25 (coxIII 5'region) - rice mitochondrion gi|804814|gb|AAA66047.1| (M74241) orf25 [Oryza sativa subsp. indica]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22036  | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45836  | Strand  |                      |
| Start    | 8293   | End     | 8429                 |
| Name     | OJ990105_08.9819.C21.o3.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 8293   | End     | 8429                 |
| GI       | none   | Score   | 158                  |
| Exons    | 8293..8382, 8294..8380, 8377..8400, 8391..8429, 8391..8429 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22036  | Seq. ID | OJ990105_08.9819.C21 |
| Gene No. | 45837  | Strand  |                      |
| Start    | 8431   | End     | 8645                 |
| Name     | OJ990105_08.9819.C21.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 8431   | End     | 8645                 |
| GI       | none   | Score   | 171                  |
| Exons    | 8431..8601, 8435..8554, 8445..8573, 8446..8595, 8598..8645, 8600..8641 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22037  | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45838  | Strand  | +                    |
| Start    | 1  | End     | 5918                 |
| Name     | OJ990105_08.9819.C22.o1.np   | Method  | AAT/NAP              |
| Start    | 1  | End     | 5882                 |
| GI       | 5922631  | Score   | 6177                 |
| Exons    | 1..24, 379..438, 688..890, 936..1507, 1550..1700, 1827..2748, 3355..5882 |         |                      |

GI Descrip. (AP000492) ESTs C26347(C12145),AU078074(C12145) correspond to a region of the predicted gene.; similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativa] gi|6016864|dbj|BAA85207.1| (AP000570) ESTs C26347(C12145),AU078074(C12145) correspond to a region of the predicted gene.; Similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativ

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22037   | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45838   | Strand  | +                    |
| Start    | 1   | End     | 5918                 |
| Name     | OJ990105_08.9819.C22.o1.gs                    | Method  | GENSCAN              |
| Start    | 391   | End     | 5918                 |
| GI       | none  | Score   | .83                  |
| Exons    | 391..1445, 1454..1898, 2074..2740, 2837..5918 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22037  | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45839  | Strand  | -                    |
| Start    | 6234   | End     | 9465                 |
| Name     | OJ990105_08.9819.C22.o2.gs   | Method  | GENSCAN              |
| Start    | 6234   | End     | 9465                 |
| GI       | none   | Score   | .81                  |
| Exons    | 6234..6682, 6755..6859, 6932..7121, 7197..7384, 7459..7817, 7869..8052, 8118..8151, 8277..9200, 9288..9312, 9434..9465 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22037   | Seq. ID | OJ990105_08.9819.C22 |
| Gene No.    | 45839   | Strand  | -                    |
| Start       | 6234  | End     | 9465                 |
| Name        | OJ990105_08.9819.C22.o2.np  | Method  | AAT/NAP              |
| Start       | 6237  | End     | 9161                 |
| GI          | 6691716   | Score   | 2348                 |
| Exons       | 6237..6682, 6755..6859, 7010..7121, 7197..7391, 7568..7817, 7899..8096, 8286..9161  |         |                      |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6691717 dbj BAA89397.1  (AP000570) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22037                      | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840                      | Strand  | -                    |
| Start    | 11091                      | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o8.tw | Method  | TBLASTX:Wheat        |
| Start    | 1112                       | End     | 1436                 |
| GI       | none                       | Score   | 262                  |
| Exons    | 1112..1381, 1113..1436     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22037                              | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840                              | Strand  | -                    |
| Start    | 11091                              | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o6.tw         | Method  | TBLASTX:Wheat        |
| Start    | 2088                               | End     | 2545                 |
| GI       | none                               | Score   | 149                  |
| Exons    | 2088..2264, 2309..2545, 2313..2543 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22037                      | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840                      | Strand  | -                    |
| Start    | 11091                      | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 2765                       | End     | 3221                 |
| GI       | none                       | Score   | 497                  |
| Exons    | 2765..3220, 2766..3221     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22037                      | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840                      | Strand  | -                    |
| Start    | 11091                      | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 2805                       | End     | 3170                 |
| GI       | none                       | Score   | 135                  |
| Exons    | 2805..3029, 3036..3170     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22037                      | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840                      | Strand  | -                    |
| Start    | 11091                      | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o2.tm | Method  | TBLASTX:Maize        |

Start 2895  
 GI none  
 Exons 2895..3251, 2936..3241

End 3251  
 Score 375

Seq. No. 22037  
 Gene No. 45840  
 Start 11091  
 Name OJ990105\_08.9819.C22.o2.tw  
 Start 3336  
 GI none  
 Exons 3336..3755, 3380..3760, 3401..3760

Seq. ID OJ990105\_08.9819.C22  
 Strand -  
 End 12331  
 Method TBLASTX:Wheat  
 End 3760  
 Score 434

Seq. No. 22037  
 Gene No. 45840  
 Start 11091  
 Name OJ990105\_08.9819.C22.o1.ts  
 Start 3414  
 GI none  
 Exons 3414..3815, 3431..3574, 3611..3784

Seq. ID OJ990105\_08.9819.C22  
 Strand -  
 End 12331  
 Method TBLASTX:Soybean  
 End 3815  
 Score 315

Seq. No. 22037  
 Gene No. 45840  
 Start 11091  
 Name OJ990105\_08.9819.C22.o3.tm  
 Start 3482  
 GI none  
 Exons 3482..3736, 3483..3737, 3758..3889, 3759..3902, 3900..3926

Seq. ID OJ990105\_08.9819.C22  
 Strand -  
 End 12331  
 Method TBLASTX:Maize  
 End 3926  
 Score 273

Seq. No. 22037  
 Gene No. 45840  
 Start 11091  
 Name OJ990105\_08.9819.C22.o7.tw  
 Start 3764  
 GI none  
 Exons 3764..3841, 3765..4046, 3900..4031, 3952..4050

Seq. ID OJ990105\_08.9819.C22  
 Strand -  
 End 12331  
 Method TBLASTX:Wheat  
 End 4050  
 Score 269

Seq. No. 22037  
 Gene No. 45840  
 Start 11091  
 Name OJ990105\_08.9819.C22.o2.ts  
 Start 4041  
 GI none  
 Exons 4041..4145, 4049..4429, 4185..4427

Seq. ID OJ990105\_08.9819.C22  
 Strand -  
 End 12331  
 Method TBLASTX:Soybean  
 End 4429  
 Score 86

Seq. No. 22037  
 Gene No. 45840  
 Start 11091  
 Name OJ990105\_08.9819.C22.o4.tw  
 Start 4050  
 GI none  
 Exons 4050..4472, 4058..4462

Seq. ID OJ990105\_08.9819.C22  
 Strand -  
 End 12331  
 Method TBLASTX:Wheat  
 End 4472  
 Score 414

Seq. No. 22037  
 Gene No. 45840  
 Start 11091  
 Name OJ990105\_08.9819.C22.o5.tm  
 Start 4302

Seq. ID OJ990105\_08.9819.C22  
 Strand -  
 End 12331  
 Method TBLASTX:Maize  
 End 4556



|          |  |         |                      |
|----------|--|---------|----------------------|
| GI       | none   | Score   | 193                  |
| Exons    | 4302..4556   |         |                      |
|          |  |         |                      |
| Seq. No. | 22037  | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840  | Strand  | -                    |
| Start    | 11091  | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o10.tw                                | Method  | TBLASTX:Wheat        |
| Start    | 4488   | End     | 4787                 |
| GI       | none   | Score   | 130                  |
| Exons    | 4488..4622, 4647..4787                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22037  | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840  | Strand  | -                    |
| Start    | 11091  | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 4784   | End     | 5147                 |
| GI       | none   | Score   | 446                  |
| Exons    | 4784..5095, 4785..5108, 4805..5119, 5099..5146, 5100..5147 |         |                      |
|          |  |         |                      |
| Seq. No. | 22037  | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840  | Strand  | -                    |
| Start    | 11091  | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o3.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 4788   | End     | 5178                 |
| GI       | none   | Score   | 420                  |
| Exons    | 4788..4946, 4790..5101, 4791..5177, 4986..5177, 4987..5178 |         |                      |
|          |  |         |                      |
| Seq. No. | 22037  | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840  | Strand  | -                    |
| Start    | 11091  | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o6.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 5249   | End     | 5522                 |
| GI       | none   | Score   | 89                   |
| Exons    | 5249..5356, 5250..5348, 5339..5413, 5343..5426, 5436..5522 |         |                      |
|          |  |         |                      |
| Seq. No. | 22037  | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840  | Strand  | -                    |
| Start    | 11091  | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o5.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 5292   | End     | 5906                 |
| GI       | none   | Score   | 279                  |
| Exons    | 5292..5570, 5312..5401, 5453..5560, 5625..5783, 5769..5906 |         |                      |
|          |  |         |                      |
| Seq. No. | 22037  | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840  | Strand  | -                    |
| Start    | 11091  | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o4.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 5634   | End     | 5869                 |
| GI       | none   | Score   | 152                  |
| Exons    | 5634..5786, 5765..5869, 5766..5867                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22037  | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840  | Strand  | -                    |
| Start    | 11091  | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o9.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 8751   | End     | 9041                 |
| GI       | none   | Score   | 213                  |

Exons 8751..9041

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22037                      | Seq. ID | OJ990105_08.9819.C22 |
| Gene No. | 45840                      | Strand  | -                    |
| Start    | 11091                      | End     | 12331                |
| Name     | OJ990105_08.9819.C22.o3.gs | Method  | GENSCAN              |
| Start    | 11091                      | End     | 12331                |
| GI       | none                       | Score   | .96                  |
| Exons    | 11091..11225, 12248..12331 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22038   | Seq. ID | OJ990105_08.9819.C23 |
| Gene No.    | 45841   | Strand  | +                    |
| Start       | 1   | End     | 1673                 |
| Name        | OJ990105_08.9819.C23.o1.np                          | Method  | AAT/NAP              |
| Start       | 1   | End     | 1123                 |
| GI          | 4680179   | Score   | 295                  |
| Exons       | 1..40, 257..809, 888..1123                          |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22038  | Seq. ID | OJ990105_08.9819.C23 |
| Gene No.    | 45841  | Strand  | +                    |
| Start       | 1  | End     | 1673                 |
| Name        | OJ990105_08.9819.C23.o2.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 1179                 |
| GI          | 130582   | Score   | 50                   |
| Exons       | 1..22, 1043..1179  |         |                      |
| GI Descrip. | RETROVIRUS-RELATED POL POLYPROTEIN FROM TRANSPOSON TNT 1-94<br>[CONTAINS: PROTEASE ; REVERSE TRANSCRIPTASE ; ENDONUCLEASE]<br>gi 100342 pir  S04273 hypothetical protein - common tobacco<br>gi 20045 emb CAA32025  (X13777) ORF [Nicotiana tabacum] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22038                      | Seq. ID | OJ990105_08.9819.C23 |
| Gene No. | 45841                      | Strand  | +                    |
| Start    | 1                          | End     | 1673                 |
| Name     | OJ990105_08.9819.C23.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 433                        | End     | 732                  |
| GI       | none                       | Score   | 224                  |
| Exons    | 433..732, 456..560         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22038                      | Seq. ID | OJ990105_08.9819.C23 |
| Gene No. | 45841                      | Strand  | +                    |
| Start    | 1                          | End     | 1673                 |
| Name     | OJ990105_08.9819.C23.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 433                        | End     | 783                  |
| GI       | none                       | Score   | 269                  |
| Exons    | 433..783, 447..611         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22038                      | Seq. ID | OJ990105_08.9819.C23 |
| Gene No. | 45841                      | Strand  | +                    |
| Start    | 1                          | End     | 1673                 |
| Name     | OJ990105_08.9819.C23.o1.gs | Method  | GENSCAN              |
| Start    | 460                        | End     | 1673                 |
| GI       | none                       | Score   | .89                  |
| Exons    | 460..1206, 1581..1673      |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22039 | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45842 | Strand  | +                    |

|       |                            |        |         |
|-------|----------------------------|--------|---------|
| Start | 1891                       | End    | 2682    |
| Name  | OJ990105_08.9819.C24.o1.gs | Method | GENSCAN |
| Start | 1891                       | End    | 2682    |
| GI    | none                       | Score  | .97     |
| Exons | 1891..2682                 |        |         |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22039   | Seq. ID | OJ990105_08.9819.C24 |
| Gene No.    | 45843   | Strand  | +                    |
| Start       | 2901  | End     | 7595                 |
| Name        | OJ990105_08.9819.C24.o1.np                          | Method  | AAT/NAP              |
| Start       | 2901  | End     | 7595                 |
| GI          | 4680179   | Score   | 4946                 |
| Exons       | 2901..3956, 3984..6940, 7510..7595                  |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22039                      | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843                      | Strand  | +                    |
| Start    | 2901                       | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o8.tw | Method  | TBLASTX:Wheat        |
| Start    | 3107                       | End     | 3305                 |
| GI       | none                       | Score   | 215                  |
| Exons    | 3107..3304, 3108..3305     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22039                      | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843                      | Strand  | +                    |
| Start    | 2901                       | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o6.tw | Method  | TBLASTX:Wheat        |
| Start    | 3356                       | End     | 3707                 |
| GI       | none                       | Score   | 289                  |
| Exons    | 3356..3529, 3357..3707     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22039                      | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843                      | Strand  | +                    |
| Start    | 2901                       | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o5.tm | Method  | TBLASTX:Maize        |
| Start    | 3357                       | End     | 3662                 |
| GI       | none                       | Score   | 233                  |
| Exons    | 3357..3662, 3383..3532     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22039                      | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843                      | Strand  | +                    |
| Start    | 2901                       | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o7.tw | Method  | TBLASTX:Wheat        |
| Start    | 4041                       | End     | 4394                 |
| GI       | none                       | Score   | 256                  |
| Exons    | 4041..4394                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22039                      | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843                      | Strand  | +                    |
| Start    | 2901                       | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o6.tm | Method  | TBLASTX:Maize        |
| Start    | 4398                       | End     | 4591                 |
| GI       | none                       | Score   | 188                  |
| Exons    | 4398..4589, 4436..4591     |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22039 | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843 | Strand  | +                    |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Start       | 2901   | End     | 7595                 |
| Name        | OJ990105_08.9819.C24.o4.tw   | Method  | TBLASTX:Wheat        |
| Start       | 4526   | End     | 5010                 |
| GI          | none   | Score   | 535                  |
| Exons       | 4526..4966, 4527..5009, 4530..5006, 4636..5010                         |         |                      |
|             |  |         |                      |
| Seq. No.    | 22039  | Seq. ID | OJ990105_08.9819.C24 |
| Gene No.    | 45843  | Strand  | +                    |
| Start       | 2901   | End     | 7595                 |
| Name        | OJ990105_08.9819.C24.o4.ts   | Method  | TBLASTX:Soybean      |
| Start       | 4563   | End     | 4877                 |
| GI          | none   | Score   | 198                  |
| Exons       | 4563..4877   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22039  | Seq. ID | OJ990105_08.9819.C24 |
| Gene No.    | 45843  | Strand  | +                    |
| Start       | 2901   | End     | 7595                 |
| Name        | OJ990105_08.9819.C24.o4.tm   | Method  | TBLASTX:Maize        |
| Start       | 4592   | End     | 5039                 |
| GI          | none   | Score   | 373                  |
| Exons       | 4592..5029, 4596..5039   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22039  | Seq. ID | OJ990105_08.9819.C24 |
| Gene No.    | 45843  | Strand  | +                    |
| Start       | 2901   | End     | 7595                 |
| Name        | OJ990105_08.9819.C24.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 4950   | End     | 5345                 |
| GI          | none   | Score   | 57                   |
| Exons       | 4950..4982, 4950..4982, 4986..5039, 4988..5029, 5094..5345, 5102..5335 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22039  | Seq. ID | OJ990105_08.9819.C24 |
| Gene No.    | 45843  | Strand  | +                    |
| Start       | 2901   | End     | 7595                 |
| Name        | OJ990105_08.9819.C24.o2.np   | Method  | AAT/NAP              |
| Start       | 5097   | End     | 7293                 |
| GI          | 485862   | Score   | 188                  |
| Exons       | 5097..5118, 7033..7293   |         |                      |
| GI Descrip. | (X75036) NADH dehydrogenase [Triticum aestivum]                        |         |                      |
|             |  |         |                      |
| Seq. No.    | 22039  | Seq. ID | OJ990105_08.9819.C24 |
| Gene No.    | 45843  | Strand  | +                    |
| Start       | 2901   | End     | 7595                 |
| Name        | OJ990105_08.9819.C24.o5.tw   | Method  | TBLASTX:Wheat        |
| Start       | 5097   | End     | 5327                 |
| GI          | none   | Score   | 321                  |
| Exons       | 5097..5327, 5099..5326   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22039  | Seq. ID | OJ990105_08.9819.C24 |
| Gene No.    | 45843  | Strand  | +                    |
| Start       | 2901   | End     | 7595                 |
| Name        | OJ990105_08.9819.C24.o2.tm   | Method  | TBLASTX:Maize        |
| Start       | 5247   | End     | 5681                 |
| GI          | none   | Score   | 38                   |
| Exons       | 5247..5279, 5277..5648, 5294..5617, 5640..5681                         |         |                      |
|             |  |         |                      |
| Seq. No.    | 22039  | Seq. ID | OJ990105_08.9819.C24 |

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 45843  | Strand | +             |
| Start    | 2901   | End    | 7595          |
| Name     | OJ990105_08.9819.C24.o3.tw                     | Method | TBLASTX:Wheat |
| Start    | 5330   | End    | 5744          |
| GI       | none   | Score  | 576           |
| Exons    | 5330..5425, 5331..5744, 5444..5728, 5512..5742 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22039                      | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843                      | Strand  | +                    |
| Start    | 2901                       | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 5367                       | End     | 5615                 |
| GI       | none                       | Score   | 206                  |
| Exons    | 5367..5615                 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22039                              | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843                              | Strand  | +                    |
| Start    | 2901                               | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o2.tw         | Method  | TBLASTX:Wheat        |
| Start    | 5851                               | End     | 6354                 |
| GI       | none                               | Score   | 606                  |
| Exons    | 5851..6354, 5997..6047, 6099..6350 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22039                              | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843                              | Strand  | +                    |
| Start    | 2901                               | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o1.tc         | Method  | TBLASTX:Cress        |
| Start    | 6052                               | End     | 6378                 |
| GI       | none                               | Score   | 90                   |
| Exons    | 6052..6234, 6235..6378, 6237..6377 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22039                      | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843                      | Strand  | +                    |
| Start    | 2901                       | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 6142                       | End     | 6402                 |
| GI       | none                       | Score   | 301                  |
| Exons    | 6142..6402, 6153..6401     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22039  | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843  | Strand  | +                    |
| Start    | 2901   | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o3.tm                     | Method  | TBLASTX:Maize        |
| Start    | 6201   | End     | 6492                 |
| GI       | none   | Score   | 152                  |
| Exons    | 6201..6488, 6201..6488, 6202..6492, 6334..6489 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22039                      | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843                      | Strand  | +                    |
| Start    | 2901                       | End     | 7595                 |
| Name     | OJ990105_08.9819.C24.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 6361                       | End     | 6939                 |
| GI       | none                       | Score   | 664                  |
| Exons    | 6361..6939, 6420..6869     |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22039 | Seq. ID | OJ990105_08.9819.C24 |
| Gene No. | 45843 | Strand  | +                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 2901   | End    | 7595          |
| Name  | OJ990105_08.9819.C24.o1.tm   | Method | TBLASTX:Maize |
| Start | 6540   | End    | 6939          |
| GI    | none   | Score  | 230           |
| Exons | 6540..6695, 6541..6702, 6555..6704, 6699..6872, 6700..6939, 6859..6924 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22040                      | Seq. ID | OJ990105_08.9819.C25 |
| Gene No. | 45844                      | Strand  | +                    |
| Start    | 1709                       | End     | 1976                 |
| Name     | OJ990105_08.9819.C25.o1.gs | Method  | GENSCAN              |
| Start    | 1709                       | End     | 1976                 |
| GI       | none                       | Score   | .56                  |
| Exons    | 1709..1976                 |         |                      |

|             |                                    |         |                      |
|-------------|------------------------------------|---------|----------------------|
| Seq. No.    | 22041                              | Seq. ID | OJ990105_08.9819.C26 |
| Gene No.    | 45845                              | Strand  | +                    |
| Start       | 3754                               | End     | 5461                 |
| Name        | OJ990105_08.9819.C26.o1.np         | Method  | AAT/NAP              |
| Start       | 3754                               | End     | 5461                 |
| GI          | 5091604                            | Score   | 189                  |
| Exons       | 3754..3946, 5430..5461             |         |                      |
| GI Descrip. | (AC007858) 10A19I.8 [Oryza sativa] |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22041                              | Seq. ID | OJ990105_08.9819.C26 |
| Gene No. | 45845                              | Strand  | +                    |
| Start    | 3754                               | End     | 5461                 |
| Name     | OJ990105_08.9819.C26.o1.gs         | Method  | GENSCAN              |
| Start    | 3766                               | End     | 5409                 |
| GI       | none                               | Score   | .47                  |
| Exons    | 3766..4022, 4392..4406, 5337..5409 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22041                      | Seq. ID | OJ990105_08.9819.C26 |
| Gene No. | 45846                      | Strand  | +                    |
| Start    | 5379                       | End     | 5628                 |
| Name     | OJ990105_08.9819.C26.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 3748                       | End     | 3942                 |
| GI       | none                       | Score   | 235                  |
| Exons    | 3748..3942, 3765..3887     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22041                      | Seq. ID | OJ990105_08.9819.C26 |
| Gene No. | 45846                      | Strand  | +                    |
| Start    | 5379                       | End     | 5628                 |
| Name     | OJ990105_08.9819.C26.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 3757                       | End     | 3942                 |
| GI       | none                       | Score   | 238                  |
| Exons    | 3757..3942, 3762..3884     |         |                      |

|             |                                |         |                      |
|-------------|--------------------------------|---------|----------------------|
| Seq. No.    | 22041                          | Seq. ID | OJ990105_08.9819.C26 |
| Gene No.    | 45846                          | Strand  | +                    |
| Start       | 5379                           | End     | 5628                 |
| Name        | OJ990105_08.9819.C26.o2.np     | Method  | AAT/NAP              |
| Start       | 5379                           | End     | 5628                 |
| GI          | 769720                         | Score   | 295                  |
| Exons       | 5379..5628                     |         |                      |
| GI Descrip. | (D32052) ORF83B [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22042                                      | Seq. ID | OJ990105_08.9819.C27 |
| Gene No. | 45847                                      | Strand  | +                    |
| Start    | 629  | End     | 2235                 |
| Name     | OJ990105_08.9819.C27.o1.gs                 | Method  | GENSCAN              |
| Start    | 629  | End     | 1761                 |
| GI       | none                                       | Score   | .69                  |
| Exons    | 629..866, 922..954, 1341..1582, 1723..1761 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22042  | Seq. ID | OJ990105_08.9819.C27 |
| Gene No.    | 45847  | Strand  | +                    |
| Start       | 629  | End     | 2235                 |
| Name        | OJ990105_08.9819.C27.o3.np   | Method  | AAT/NAP              |
| Start       | 1382   | End     | 2235                 |
| GI          | 124197   | Score   | 263                  |
| Exons       | 1382..1617, 2203..2235   |         |                      |
| GI Descrip. | TRANSLATION INITIATION FACTOR IF-1, CHLOROPLAST<br>gi 72885 pir  FIRZ1 translation initiation factor IF-1 - rice<br>chloroplast gi 12021 emb CAA33930  (X15901) initiation factor 1<br>[Oryza sativa] gi 226642 prf  1603356BR initiation factor 1<br>[Oryza sativa] gi 227785 prf  1711263A initiation factor 1<br>[Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22042  | Seq. ID | OJ990105_08.9819.C27 |
| Gene No. | 45848  | Strand  | -                    |
| Start    | 1147   | End     | 2235                 |
| Name     | OJ990105_08.9819.C27.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 983  | End     | 1600                 |
| GI       | none   | Score   | 179                  |
| Exons    | 983..1303, 998..1171, 999..1304, 1243..1305, 1416..1598,<br>1416..1598, 1418..1600 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22042   | Seq. ID | OJ990105_08.9819.C27 |
| Gene No. | 45848   | Strand  | -                    |
| Start    | 1147  | End     | 2235                 |
| Name     | OJ990105_08.9819.C27.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 998   | End     | 1421                 |
| GI       | none  | Score   | 79                   |
| Exons    | 998..1066, 999..1187, 1000..1065, 1100..1126, 1143..1208,<br>1194..1421, 1205..1417 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22042   | Seq. ID | OJ990105_08.9819.C27 |
| Gene No. | 45848   | Strand  | -                    |
| Start    | 1147  | End     | 2235                 |
| Name     | OJ990105_08.9819.C27.o1.tw  | Method  | TBLASTX:Wheat        |
| Start    | 1093  | End     | 1423                 |
| GI       | none  | Score   | 60                   |
| Exons    | 1093..1128, 1093..1128, 1094..1132, 1102..1170, 1112..1168,<br>1114..1170, 1179..1421, 1196..1417, 1217..1423 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22042  | Seq. ID | OJ990105_08.9819.C27 |
| Gene No.    | 45848  | Strand  | -                    |
| Start       | 1147   | End     | 2235                 |
| Name        | OJ990105_08.9819.C27.o1.gp                                     | Method  | AAT/GAP              |
| Start       | 1147   | End     | 1422                 |
| GI          | 481_1.R1084  | Score   | 485                  |
| Exons       | 1147..1422   |         |                      |
| GI Descrip. | '132672/sp P12137 RK14_ORYSA 6.0e-57 CHLOROPLAST 50S RIBOSOMAL |         |                      |

PROTEIN L14 >gi\_71224\_pir\_R5RZ14 ribosomal protein L14 - rice chloroplast >gi\_12023\_emb\_CAA33932\_ (X15901) ribosomal protein L14 [Oryza sativa] >gi\_226644\_prf\_1603356BU ribosomal protein L14 [Oryza sativa]'

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22042                      | Seq. ID | OJ990105_08.9819.C27 |
| Gene No. | 45848                      | Strand  | -                    |
| Start    | 1147                       | End     | 2235                 |
| Name     | OJ990105_08.9819.C27.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 1167                       | End     | 1403                 |
| GI       | none                       | Score   | 230                  |
| Exons    | 1167..1403, 1199..1402     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22042  | Seq. ID | OJ990105_08.9819.C27 |
| Gene No.    | 45848  | Strand  | -                    |
| Start       | 1147   | End     | 2235                 |
| Name        | OJ990105_08.9819.C27.o2.np   | Method  | AAT/NAP              |
| Start       | 1208   | End     | 2235                 |
| GI          | 132672   | Score   | 321                  |
| Exons       | 1208..1418, 2214..2235   |         |                      |
| GI Descrip. | CHLOROPLAST 50S RIBOSOMAL PROTEIN L14 gi 71224 pir  R5RZ14 ribosomal protein L14 - rice chloroplast gi 12023 emb CAA33932  (X15901) ribosomal protein L14 [Oryza sativa] gi 226644 prf  1603356BU ribosomal protein L14 [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22043   | Seq. ID | OJ990105_08.9819.C28 |
| Gene No.    | 45849   | Strand  | +                    |
| Start       | 574   | End     | 718                  |
| Name        | OJ990105_08.9819.C28.o1.gp  | Method  | AAT/GAP              |
| Start       | 574   | End     | 718                  |
| GI          | 10569 1.R1084   | Score   | 229                  |
| Exons       | 574..718  |         |                      |
| GI Descrip. | '11957/emb X15901 CHOSXX 1.0e-145 Rice complete chloroplast genome' |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22043                        | Seq. ID | OJ990105_08.9819.C28 |
| Gene No. | 45850                        | Strand  | -                    |
| Start    | 763                          | End     | 948                  |
| Name     | OJ990105_08.9819.C28.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 578                          | End     | 734                  |
| GI       | none                         | Score   | 223                  |
| Exons    | 578..718, 579..734, 627..719 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22043                      | Seq. ID | OJ990105_08.9819.C28 |
| Gene No. | 45850                      | Strand  | -                    |
| Start    | 763                        | End     | 948                  |
| Name     | OJ990105_08.9819.C28.o1.gs | Method  | GENSCAN              |
| Start    | 763                        | End     | 948                  |
| GI       | none                       | Score   | .48                  |
| Exons    | 763..795, 851..948         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22044                      | Seq. ID | OJ990105_08.9819.C29 |
| Gene No. | 45851                      | Strand  | +                    |
| Start    | 355                        | End     | 1169                 |
| Name     | OJ990105_08.9819.C29.o1.gs | Method  | GENSCAN              |
| Start    | 355                        | End     | 1169                 |
| GI       | none                       | Score   | .53                  |



Exons 355..459, 846..1169

Seq. No. 22044 Seq. ID OJ990105\_08.9819.C29  
Gene No. 45852 Strand -  
Start 388 End 1199  
Name OJ990105\_08.9819.C29.o1.np Method AAT/NAP  
Start 388 End 1199  
GI 6907087 Score 209  
Exons 388..490, 1030..1199  
GI Descrip. (AP001129) ESTs C72771(E2215), AU082313(E2215) correspond to a  
region of the predicted gene.; hypothetical protein [Oryza  
sativa]

Seq. No. 22045 Seq. ID OJ990105\_08.9819.C32  
Gene No. 45853 Strand -  
Start 443 End 1480  
Name OJ990105\_08.9819.C32.o1.gs Method GENSCAN  
Start 443 End 1480  
GI none Score .48  
Exons 443..1480

Seq. No. 22046 Seq. ID OJ990105\_08.9819.C33  
Gene No. 45854 Strand +  
Start 1 End 788  
Name OJ990105\_08.9819.C33.o1.np Method AAT/NAP  
Start 1 End 788  
GI 4680179 Score 961  
Exons 1..788  
GI Descrip. (AF111709) polyprotein [Oryza sativa subsp. indica]

Seq. No. 22046 Seq. ID OJ990105\_08.9819.C33  
Gene No. 45855 Strand -  
Start 1 End 2055  
Name OJ990105\_08.9819.C33.o2.np Method AAT/NAP  
Start 1 End 2055  
GI 5852179 Score 183  
Exons 1..81, 1420..1734, 1809..2055  
GI Descrip. (AL117265) zhb0009.1 [Oryza sativa]

Seq. No. 22046 Seq. ID OJ990105\_08.9819.C33  
Gene No. 45855 Strand -  
Start 1 End 2055  
Name OJ990105\_08.9819.C33.o1.tm Method TBLASTX:Maize  
Start 37 End 548  
GI none Score 90  
Exons 37..114, 44..112, 121..306, 135..305, 311..406, 391..423,  
425..499, 513..548

Seq. No. 22046 Seq. ID OJ990105\_08.9819.C33  
Gene No. 45855 Strand -  
Start 1 End 2055  
Name OJ990105\_08.9819.C33.o1.tw Method TBLASTX:Wheat  
Start 37 End 406  
GI none Score 255  
Exons 37..303, 135..302, 308..406

Seq. No. 22046 Seq. ID OJ990105\_08.9819.C33

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 45855  | Strand  | -                    |
| Start       | 1  | End     | 2055                 |
| Name        | OJ990105_08.9819.C33.o1.gs                                 | Method  | GENSCAN              |
| Start       | 125  | End     | 1916                 |
| GI          | none   | Score   | .64                  |
| Exons       | 125..228, 551..688, 747..812, 1100..1916                   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22046  | Seq. ID | OJ990105_08.9819.C33 |
| Gene No.    | 45855  | Strand  | -                    |
| Start       | 1  | End     | 2055                 |
| Name        | OJ990105_08.9819.C33.o2.tw                                 | Method  | TBLASTX:Wheat        |
| Start       | 425  | End     | 692                  |
| GI          | none   | Score   | 83                   |
| Exons       | 425..499, 512..691, 513..692                               |         |                      |
|             |  |         |                      |
| Seq. No.    | 22047  | Seq. ID | OJ990715_07.9819.C2  |
| Gene No.    | 45856  | Strand  | +                    |
| Start       | 195  | End     | 335                  |
| Name        | OJ990715_07.9819.C2.o1.gs                                  | Method  | GENSCAN              |
| Start       | 195  | End     | 335                  |
| GI          | none   | Score   | .57                  |
| Exons       | 195..335   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22048  | Seq. ID | OJ990715_07.9819.C3  |
| Gene No.    | 45857  | Strand  | +                    |
| Start       | 1  | End     | 437                  |
| Name        | OJ990715_07.9819.C3.o1.np                                  | Method  | AAT/NAP              |
| Start       | 1  | End     | 437                  |
| GI          | 5902446  | Score   | 685                  |
| Exons       | 1..437   |         |                      |
| GI Descrip. | (AB030283) orf5 [Oryza sativa]                             |         |                      |
|             |  |         |                      |
| Seq. No.    | 22048  | Seq. ID | OJ990715_07.9819.C3  |
| Gene No.    | 45857  | Strand  | +                    |
| Start       | 1  | End     | 437                  |
| Name        | OJ990715_07.9819.C3.o1.gs                                  | Method  | GENSCAN              |
| Start       | 46   | End     | 369                  |
| GI          | none   | Score   | .74                  |
| Exons       | 46..369  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22049  | Seq. ID | OJ990715_07.9819.C6  |
| Gene No.    | 45858  | Strand  | -                    |
| Start       | 995  | End     | 2454                 |
| Name        | OJ990715_07.9819.C6.o1.tw                                  | Method  | TBLASTX:Wheat        |
| Start       | 397  | End     | 645                  |
| GI          | none   | Score   | 55                   |
| Exons       | 397..507, 398..508, 516..572, 522..566, 573..644, 577..645 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22049  | Seq. ID | OJ990715_07.9819.C6  |
| Gene No.    | 45858  | Strand  | -                    |
| Start       | 995  | End     | 2454                 |
| Name        | OJ990715_07.9819.C6.o1.gs                                  | Method  | GENSCAN              |
| Start       | 995  | End     | 2454                 |
| GI          | none   | Score   | .97                  |
| Exons       | 995..1445, 1931..2454                                      |         |                      |
|             |  |         |                      |
| Seq. No.    | 22049  | Seq. ID | OJ990715_07.9819.C6  |

|             |   |        |         |
|-------------|---|--------|---------|
| Gene No.    | 45858   | Strand | -       |
| Start       | 995   | End    | 2454    |
| Name        | OJ990715_07.9819.C6.o1.np                                       | Method | AAT/NAP |
| Start       | 1001  | End    | 2391    |
| GI          | 6911845   | Score  | 535     |
| Exons       | 1001..1487, 1931..2391  |        |         |
| GI Descrip. | (AL138649) sulfotransferase-like protein [Arabidopsis thaliana] |        |         |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22049  | Seq. ID | OJ990715_07.9819.C6 |
| Gene No. | 45858  | Strand  | -                   |
| Start    | 995  | End     | 2454                |
| Name     | OJ990715_07.9819.C6.o1.tc                                  | Method  | TBLASTX:Cress       |
| Start    | 1004   | End     | 1426                |
| GI       | none   | Score   | 73                  |
| Exons    | 1004..1126, 1026..1121, 1028..1141, 1122..1271, 1148..1426 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22049                     | Seq. ID | OJ990715_07.9819.C6 |
| Gene No. | 45858                     | Strand  | -                   |
| Start    | 995                       | End     | 2454                |
| Name     | OJ990715_07.9819.C6.o1.tm | Method  | TBLASTX:Maize       |
| Start    | 1112                      | End     | 1360                |
| GI       | none                      | Score   | 97                  |
| Exons    | 1112..1360, 1143..1271    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22049                     | Seq. ID | OJ990715_07.9819.C6 |
| Gene No. | 45858                     | Strand  | -                   |
| Start    | 995                       | End     | 2454                |
| Name     | OJ990715_07.9819.C6.o1.gp | Method  | AAT/GAP             |
| Start    | 2000                      | End     | 2399                |
| GI       | 2428038                   | Score   | 738                 |
| Exons    | 2000..2399                |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22049  | Seq. ID | OJ990715_07.9819.C6 |
| Gene No. | 45858  | Strand  | -                   |
| Start    | 995  | End     | 2454                |
| Name     | OJ990715_07.9819.C6.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 2083   | End     | 2454                |
| GI       | none   | Score   | 114                 |
| Exons    | 2083..2241, 2083..2226, 2188..2376, 2197..2313, 2323..2394, 2356..2454, 2396..2419 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22050   | Seq. ID | OJ990715_07.9819.C7 |
| Gene No.    | 45859   | Strand  | +                   |
| Start       | 5108  | End     | 15245               |
| Name        | OJ990715_07.9819.C7.o1.np                               | Method  | AAT/NAP             |
| Start       | 5108  | End     | 11973               |
| GI          | 4680183   | Score   | 4001                |
| Exons       | 5108..7590, 11116..11158, 11246..11632, 11826..11973    |         |                     |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica] |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22050                      | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45859                      | Strand  | +                   |
| Start    | 5108                       | End     | 15245               |
| Name     | OJ990715_07.9819.C7.o2.np  | Method  | AAT/NAP             |
| Start    | 11761                      | End     | 15245               |
| GI       | 4680180                    | Score   | 2600                |
| Exons    | 11761..13507, 15140..15245 |         |                     |

GI Descrip. (AF111709) polyprotein [Oryza sativa subsp. indica]

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050                                    | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45860                                    | Strand  | +                   |
| Start    | 19678                                    | End     | 25803               |
| Name     | OJ990715_07.9819.C7.o4.gs                | Method  | GENSCAN             |
| Start    | 19678                                    | End     | 25803               |
| GI       | none                                     | Score   | .65                 |
| Exons    | 19678..22598, 22695..24327, 24427..25803 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22050                                       | Seq. ID | OJ990715_07.9819.C7 |
| Gene No.    | 45860                                       | Strand  | +                   |
| Start       | 19678                                       | End     | 25803               |
| Name        | OJ990715_07.9819.C7.o6.np                   | Method  | AAT/NAP             |
| Start       | 19678                                       | End     | 22611               |
| GI          | 5902444                                     | Score   | 4921                |
| Exons       | 19678..22611                                |         |                     |
| GI Descrip. | (AB030283) GAG-POL precursor [Oryza sativa] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22050                                       | Seq. ID | OJ990715_07.9819.C7 |
| Gene No.    | 45860                                       | Strand  | +                   |
| Start       | 19678                                       | End     | 25803               |
| Name        | OJ990715_07.9819.C7.o7.np                   | Method  | AAT/NAP             |
| Start       | 22678                                       | End     | 25772               |
| GI          | 5902445                                     | Score   | 5304                |
| Exons       | 22678..25772                                |         |                     |
| GI Descrip. | (AB030283) GAG-POL precursor [Oryza sativa] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45861  | Strand  | -                   |
| Start    | 13820  | End     | 16740               |
| Name     | OJ990715_07.9819.C7.o2.gs  | Method  | GENSCAN             |
| Start    | 13820  | End     | 16740               |
| GI       | none   | Score   | .87                 |
| Exons    | 13820..14271, 14345..14460, 14667..14710, 14785..14984, 15050..15252, 15482..15702, 15858..15979, 15992..16192, 16419..16740 |         |                     |

|             |                                |         |                     |
|-------------|--------------------------------|---------|---------------------|
| Seq. No.    | 22050                          | Seq. ID | OJ990715_07.9819.C7 |
| Gene No.    | 45861                          | Strand  | -                   |
| Start       | 13820                          | End     | 16740               |
| Name        | OJ990715_07.9819.C7.o3.np      | Method  | AAT/NAP             |
| Start       | 13823                          | End     | 14285               |
| GI          | 5902446                        | Score   | 591                 |
| Exons       | 13823..14285                   |         |                     |
| GI Descrip. | (AB030283) orf5 [Oryza sativa] |         |                     |

|             |                                |         |                     |
|-------------|--------------------------------|---------|---------------------|
| Seq. No.    | 22050                          | Seq. ID | OJ990715_07.9819.C7 |
| Gene No.    | 45861                          | Strand  | -                   |
| Start       | 13820                          | End     | 16740               |
| Name        | OJ990715_07.9819.C7.o4.np      | Method  | AAT/NAP             |
| Start       | 15015                          | End     | 15759               |
| GI          | 5902447                        | Score   | 479                 |
| Exons       | 15015..15759                   |         |                     |
| GI Descrip. | (AB030283) orf4 [Oryza sativa] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22050 | Seq. ID | OJ990715_07.9819.C7 |
|----------|-------|---------|---------------------|

Gene No. 45861  
 Start 13820  
 Name OJ990715\_07.9819.C7.o5.np  
 Start 15849  
 GI 5902448  
 Exons 15849..16740  
 GI Descrip. (AB030283) orf3 [Oryza sativa]

Strand -  
 End 16740  
 Method AAT/NAP  
 End 16740  
 Score 1461

Seq. No. 22050  
 Gene No. 45862  
 Start 18238  
 Name OJ990715\_07.9819.C7.o3.gs  
 Start 18238  
 GI none  
 Exons 18238..18780

Seq. ID OJ990715\_07.9819.C7  
 Strand -  
 End 18780  
 Method GENSCAN  
 End 18780  
 Score .96

Seq. No. 22050  
 Gene No. 45863  
 Start 26090  
 Name OJ990715\_07.9819.C7.o7.tw  
 Start 6408  
 GI none  
 Exons 6408..6677, 6409..6810, 20967..21236, 20968..21369

Seq. ID OJ990715\_07.9819.C7  
 Strand -  
 End 41380  
 Method TBLASTX:Wheat  
 End 21369  
 Score 297

Seq. No. 22050  
 Gene No. 45863  
 Start 26090  
 Name OJ990715\_07.9819.C7.o6.tw  
 Start 7390  
 GI none  
 Exons 7390..7566, 7611..7754, 7615..7794, 7903..7935, 21946..22122, 22009..22122, 22165..22401, 22170..22403

Seq. ID OJ990715\_07.9819.C7  
 Strand -  
 End 41380  
 Method TBLASTX:Wheat  
 End 22403  
 Score 147

Seq. No. 22050  
 Gene No. 45863  
 Start 26090  
 Name OJ990715\_07.9819.C7.o1.tw  
 Start 11097  
 GI none  
 Exons 11097..11552, 11098..11553, 22623..23078, 22624..23079

Seq. ID OJ990715\_07.9819.C7  
 Strand -  
 End 41380  
 Method TBLASTX:Wheat  
 End 23079  
 Score 486

Seq. No. 22050  
 Gene No. 45863  
 Start 26090  
 Name OJ990715\_07.9819.C7.o3.ts  
 Start 11137  
 GI none  
 Exons 11137..11361, 11368..11502, 22663..22887, 22894..23028

Seq. ID OJ990715\_07.9819.C7  
 Strand -  
 End 41380  
 Method TBLASTX:Soybean  
 End 23028  
 Score 125

Seq. No. 22050  
 Gene No. 45863  
 Start 26090  
 Name OJ990715\_07.9819.C7.o2.tm  
 Start 11226  
 GI none  
 Exons 11226..11573, 11227..11583, 22753..23109, 22794..23099

Seq. ID OJ990715\_07.9819.C7  
 Strand -  
 End 41380  
 Method TBLASTX:Maize  
 End 23109  
 Score 364

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o3.tw  | Method  | TBLASTX:Wheat       |
| Start    | 11668  | End     | 23618               |
| GI       | none   | Score   | 402                 |
| Exons    | 11668..12087, 11766..12092, 23194..23613, 23238..23618, 23241..23618 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 11716  | End     | 23673               |
| GI       | none   | Score   | 290                 |
| Exons    | 11716..12147, 11763..11906, 11779..12060, 23272..23673, 23289..23432, 23469..23639 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 11814  | End     | 23784               |
| GI       | none   | Score   | 273                 |
| Exons    | 11814..12068, 11815..12069, 11815..12069, 12061..12222, 12232..12258, 23340..23594, 23341..23595, 23616..23747, 23617..23760, 23758..23784 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o8.tw  | Method  | TBLASTX:Wheat       |
| Start    | 12097  | End     | 23904               |
| GI       | none   | Score   | 267                 |
| Exons    | 12097..12378, 12106..12204, 12286..12381, 23622..23699, 23623..23904, 23758..23892 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 12373  | End     | 24287               |
| GI       | none   | Score   | 87                  |
| Exons    | 12373..12477, 12381..12467, 12513..12761, 12517..12669, 23899..24285, 23907..24287 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o5.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 12382  | End     | 24330               |
| GI       | none   | Score   | 335                 |
| Exons    | 12382..12804, 12387..12806, 23908..24330, 23916..24320 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22050 | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863 | Strand  | -                   |
| Start    | 26090 | End     | 41380               |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990715_07.9819.C7.o6.tm  | Method | TBLASTX:Maize |
| Start | 12435  | End    | 24234         |
| GI    | none   | Score  | 128           |
| Exons | 12435..12605, 12436..12606, 12610..12672, 23961..24131, 23971..24132, 24136..24234, 24168..24233 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o10.tw                             | Method  | TBLASTX:Wheat       |
| Start    | 12820  | End     | 24645               |
| GI       | none   | Score   | 120                 |
| Exons    | 12820..12954, 13021..13119, 24346..24480, 24505..24645 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 13117  | End     | 25005               |
| GI       | none   | Score   | 395                 |
| Exons    | 13117..13428, 13140..13427, 24643..24966, 24663..24986, 24663..24953, 24958..25005 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o4.tw  | Method  | TBLASTX:Wheat       |
| Start    | 13122  | End     | 25035               |
| GI       | none   | Score   | 318                 |
| Exons    | 13122..13340, 13123..13434, 13324..13434, 24648..24959, 24649..25035, 24844..25035 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050                                    | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863                                    | Strand  | -                   |
| Start    | 26090                                    | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o9.tw                | Method  | TBLASTX:Wheat       |
| Start    | 16330                                    | End     | 28911               |
| GI       | none                                     | Score   | 58                  |
| Exons    | 16330..16620, 16366..16524, 28621..28911 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o5.tm  | Method  | TBLASTX:Maize       |
| Start    | 25107  | End     | 25380               |
| GI       | none   | Score   | 95                  |
| Exons    | 25107..25205, 25108..25206, 25197..25271, 25201..25284, 25294..25380 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o2.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 25150  | End     | 25764               |
| GI       | none   | Score   | 362                 |
| Exons    | 25150..25641, 25170..25259, 25311..25412, 25627..25764 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o4.tm                              | Method  | TBLASTX:Maize       |
| Start    | 25492  | End     | 25725               |
| GI       | none   | Score   | 148                 |
| Exons    | 25492..25644, 25584..25643, 25623..25724, 25624..25725 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22050  | Seq. ID | OJ990715_07.9819.C7 |
| Gene No. | 45863  | Strand  | -                   |
| Start    | 26090  | End     | 41380               |
| Name     | OJ990715_07.9819.C7.o5.gs  | Method  | GENSCAN             |
| Start    | 26090  | End     | 41380               |
| GI       | none   | Score   | .61                 |
| Exons    | 26090..26538, 26611..26715, 26788..26977, 27053..27240, 27316..28060, 28147..29182, 32325..32377, 37803..37872, 38287..38498, 39729..39866, 39875..40029, 41207..41380 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22050   | Seq. ID | OJ990715_07.9819.C7 |
| Gene No.    | 45863   | Strand  | -                   |
| Start       | 26090   | End     | 41380               |
| Name        | OJ990715_07.9819.C7.o10.np  | Method  | AAT/NAP             |
| Start       | 26093   | End     | 29031               |
| GI          | 6691716   | Score   | 2366                |
| Exons       | 26093..26538, 26611..26727, 26878..26977, 27053..27240, 27316..27475, 27569..27689, 27771..27963, 28161..29031              |         |                     |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6691717 dbj BAA89397.1  (AP000570) hypothetical protein [Oryza sativa] |         |                     |

|             |                                |         |                     |
|-------------|--------------------------------|---------|---------------------|
| Seq. No.    | 22050                          | Seq. ID | OJ990715_07.9819.C7 |
| Gene No.    | 45863                          | Strand  | -                   |
| Start       | 26090                          | End     | 41380               |
| Name        | OJ990715_07.9819.C7.o8.np      | Method  | AAT/NAP             |
| Start       | 26093                          | End     | 26551               |
| GI          | 5902446                        | Score   | 733                 |
| Exons       | 26093..26551                   |         |                     |
| GI Descrip. | (AB030283) orf5 [Oryza sativa] |         |                     |

|             |                                |         |                     |
|-------------|--------------------------------|---------|---------------------|
| Seq. No.    | 22050                          | Seq. ID | OJ990715_07.9819.C7 |
| Gene No.    | 45863                          | Strand  | -                   |
| Start       | 26090                          | End     | 41380               |
| Name        | OJ990715_07.9819.C7.o11.np     | Method  | AAT/NAP             |
| Start       | 27286                          | End     | 28048               |
| GI          | 5902447                        | Score   | 1042                |
| Exons       | 27286..28048                   |         |                     |
| GI Descrip. | (AB030283) orf4 [Oryza sativa] |         |                     |

|             |                                |         |                     |
|-------------|--------------------------------|---------|---------------------|
| Seq. No.    | 22050                          | Seq. ID | OJ990715_07.9819.C7 |
| Gene No.    | 45863                          | Strand  | -                   |
| Start       | 26090                          | End     | 41380               |
| Name        | OJ990715_07.9819.C7.o12.np     | Method  | AAT/NAP             |
| Start       | 28138                          | End     | 29031               |
| GI          | 5902448                        | Score   | 1570                |
| Exons       | 28138..29031                   |         |                     |
| GI Descrip. | (AB030283) orf3 [Oryza sativa] |         |                     |



|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45864  | Strand  | +                   |
| Start       | 1285   | End     | 4059                |
| Name        | OJ990715_07.9819.C8.o1.gs  | Method  | GENSCAN             |
| Start       | 1285   | End     | 4059                |
| GI          | none   | Score   | .63                 |
| Exons       | 1285..1289, 3594..4059   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45865  | Strand  | +                   |
| Start       | 5303   | End     | 11408               |
| Name        | OJ990715_07.9819.C8.o1.np  | Method  | AAT/NAP             |
| Start       | 5303   | End     | 6515                |
| GI          | 6539570  | Score   | 230                 |
| Exons       | 5303..5342, 6129..6289, 6449..6515   |         |                     |
| GI Descrip. | (AP000836) hypothetical protein [Oryza sativa]                                     |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45865  | Strand  | +                   |
| Start       | 5303   | End     | 11408               |
| Name        | OJ990715_07.9819.C8.o2.np  | Method  | AAT/NAP             |
| Start       | 6155   | End     | 11408               |
| GI          | 4680203  | Score   | 2257                |
| Exons       | 6155..6191, 7459..9131, 9285..9607, 11367..11408                                   |         |                     |
| GI Descrip. | (AF114171) TNP2-like protein [Sorghum bicolor]                                     |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45865  | Strand  | +                   |
| Start       | 5303   | End     | 11408               |
| Name        | OJ990715_07.9819.C8.o2.gp  | Method  | AAT/GAP             |
| Start       | 7463   | End     | 9574                |
| GI          | 342_1.R1084  | Score   | 3509                |
| Exons       | 7463..9574   |         |                     |
| GI Descrip. | '4574406/gb AAD24042.1  0.0e+00 (AF121139) RIM2 protein [Oryza sativa]'            |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45865  | Strand  | +                   |
| Start       | 5303   | End     | 11408               |
| Name        | OJ990715_07.9819.C8.o3.np  | Method  | AAT/NAP             |
| Start       | 9631   | End     | 10686               |
| GI          | 4680186  | Score   | 372                 |
| Exons       | 9631..9684, 10486..10686   |         |                     |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica]                                    |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45866  | Strand  | -                   |
| Start       | 10238  | End     | 10619               |
| Name        | OJ990715_07.9819.C8.o3.tw  | Method  | TBLASTX:Wheat       |
| Start       | 7774   | End     | 8166                |
| GI          | none   | Score   | 91                  |
| Exons       | 7774..7917, 7784..7903, 7900..8151, 7908..8150, 7909..8166, 7911..8153, 7919..8161 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45866  | Strand  | -                   |
| Start       | 10238  | End     | 10619               |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Name        | OJ990715_07.9819.C8.o1.ts  | Method  | TBLASTX:Soybean     |
| Start       | 8082   | End     | 8511                |
| GI          | none   | Score   | 103                 |
| Exons       | 8082..8165, 8083..8157, 8215..8511, 8247..8498   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45866  | Strand  | -                   |
| Start       | 10238  | End     | 10619               |
| Name        | OJ990715_07.9819.C8.o1.tc  | Method  | TBLASTX:Cress       |
| Start       | 8229   | End     | 8559                |
| GI          | none   | Score   | 278                 |
| Exons       | 8229..8396, 8251..8559, 8445..8531   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45866  | Strand  | -                   |
| Start       | 10238  | End     | 10619               |
| Name        | OJ990715_07.9819.C8.o1.tw  | Method  | TBLASTX:Wheat       |
| Start       | 8380   | End     | 8848                |
| GI          | none   | Score   | 73                  |
| Exons       | 8380..8436, 8388..8432, 8433..8534, 8434..8538, 8458..8556, 8552..8638, 8553..8639, 8619..8843, 8639..8848, 8642..8848 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45866  | Strand  | -                   |
| Start       | 10238  | End     | 10619               |
| Name        | OJ990715_07.9819.C8.o1.tm  | Method  | TBLASTX:Maize       |
| Start       | 8437   | End     | 8882                |
| GI          | none   | Score   | 101                 |
| Exons       | 8437..8559, 8553..8678, 8688..8882   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45866  | Strand  | -                   |
| Start       | 10238  | End     | 10619               |
| Name        | OJ990715_07.9819.C8.o2.ts  | Method  | TBLASTX:Soybean     |
| Start       | 8712   | End     | 8954                |
| GI          | none   | Score   | 209                 |
| Exons       | 8712..8954   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45866  | Strand  | -                   |
| Start       | 10238  | End     | 10619               |
| Name        | OJ990715_07.9819.C8.o2.tw  | Method  | TBLASTX:Wheat       |
| Start       | 8987   | End     | 9444                |
| GI          | none   | Score   | 87                  |
| Exons       | 8987..9037, 8988..9050, 9036..9278, 9056..9238, 9307..9360, 9311..9373, 9312..9374, 9359..9433, 9373..9435, 9379..9444 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22051  | Seq. ID | OJ990715_07.9819.C8 |
| Gene No.    | 45866  | Strand  | -                   |
| Start       | 10238  | End     | 10619               |
| Name        | OJ990715_07.9819.C8.o3.gp  | Method  | AAT/GAP             |
| Start       | 10238  | End     | 10619               |
| GI          | uC-osflcyp033a04b1   | Score   | 675                 |
| Exons       | 10238..10619   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10'                       |         |                     |

Seq. No. 22052  
 Gene No. 45867  
 Start 590  
 Name OJ990715\_07.9819.C9.o1.gs  
 Start 590  
 GI none  
 Exons 590..1024, 1037..1627

Seq. ID OJ990715\_07.9819.C9  
 Strand +  
 End 1627  
 Method GENSCAN  
 End 1627  
 Score .81

Seq. No. 22052  
 Gene No. 45867  
 Start 590  
 Name OJ990715\_07.9819.C9.o1.np  
 Start 626  
 GI 4680203  
 Exons 626..1606  
 GI Descrip. (AF114171) TNP2-like protein [Sorghum bicolor]

Seq. ID OJ990715\_07.9819.C9  
 Strand +  
 End 1627  
 Method AAT/NAP  
 End 1606  
 Score 977

Seq. No. 22052  
 Gene No. 45868  
 Start 1246  
 Name OJ990715\_07.9819.C9.o1.gp  
 Start 1246  
 GI LIB3431-028-P1-N1-A10  
 Exons 1246..1597, 1625..1690  
 GI Descrip. '4680203/gb|AAD27566.1|AF114171\_7 3.0e-33 (AF114171) TNP2-like protein [Sorghum bicolor]'

Seq. ID OJ990715\_07.9819.C9  
 Strand -  
 End 1690  
 Method AAT/GAP  
 End 1690  
 Score 750

Seq. No. 22052  
 Gene No. 45869  
 Start 2393  
 Name OJ990715\_07.9819.C9.o1.tw  
 Start 396  
 GI none  
 Exons 396..701, 403..1137, 404..1153, 821..1138, 1146..1187, 1148..1192, 1151..1192, 1195..1290, 1199..1258, 1237..1377, 1238..1378, 1391..1471, 1460..1546

Seq. ID OJ990715\_07.9819.C9  
 Strand -  
 End 2773  
 Method TBLASTX:Wheat  
 End 1546  
 Score 635

Seq. No. 22052  
 Gene No. 45869  
 Start 2393  
 Name OJ990715\_07.9819.C9.o1.tc  
 Start 523  
 GI none  
 Exons 523..966, 527..970, 821..970

Seq. ID OJ990715\_07.9819.C9  
 Strand -  
 End 2773  
 Method TBLASTX:Cress  
 End 970  
 Score 337

Seq. No. 22052  
 Gene No. 45869  
 Start 2393  
 Name OJ990715\_07.9819.C9.o2.gs  
 Start 2393  
 GI none  
 Exons 2393..2773

Seq. ID OJ990715\_07.9819.C9  
 Strand -  
 End 2773  
 Method GENSCAN  
 End 2773  
 Score .64

Seq. No. 22053  
 Gene No. 45870  
 Start 154  
 Name OJ990715\_07.9819.C10.o1.gs

Seq. ID OJ990715\_07.9819.C10  
 Strand +  
 End 863  
 Method GENSCAN

|       |  |       |     |
|-------|--|-------|-----|
| Start | 154                                    | End   | 863 |
| GI    | none                                   | Score | .59 |
| Exons | 154..313, 404..488, 548..763, 805..863 |       |     |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22053  | Seq. ID | OJ990715_07.9819.C10 |
| Gene No. | 45871  | Strand  | +                    |
| Start    | 2501   | End     | 5186                 |
| Name     | OJ990715_07.9819.C10.o2.gs                                 | Method  | GENSCAN              |
| Start    | 2501   | End     | 4962                 |
| GI       | none   | Score   | .46                  |
| Exons    | 2501..2622, 2944..2980, 3304..3678, 3805..4725, 4821..4962 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22053   | Seq. ID | OJ990715_07.9819.C10 |
| Gene No.    | 45871   | Strand  | +                    |
| Start       | 2501  | End     | 5186                 |
| Name        | OJ990715_07.9819.C10.o3.np                        | Method  | AAT/NAP              |
| Start       | 3289  | End     | 5186                 |
| GI          | 4680204   | Score   | 843                  |
| Exons       | 3289..4725, 4821..5186                            |         |                      |
| GI Descrip. | (AF114171) hypothetical protein [Sorghum bicolor] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22053   | Seq. ID | OJ990715_07.9819.C10 |
| Gene No.    | 45872   | Strand  | -                    |
| Start       | 1   | End     | 5172                 |
| Name        | OJ990715_07.9819.C10.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 5172                 |
| GI          | 5295955   | Score   | 503                  |
| Exons       | 1..267, 440..876, 1558..1672, 2215..2284, 5021..5172                          |         |                      |
| GI Descrip. | (AB026295) Similar to Epstein-Barr virus (EBV) genome.(V01555) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22053  | Seq. ID | OJ990715_07.9819.C10 |
| Gene No. | 45872  | Strand  | -                    |
| Start    | 1  | End     | 5172                 |
| Name     | OJ990715_07.9819.C10.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 3932   | End     | 4335                 |
| GI       | none   | Score   | 64                   |
| Exons    | 3932..4072, 3932..4048, 3934..4170, 3934..4128, 4035..4175, 4165..4335, 4260..4334 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22053  | Seq. ID | OJ990715_07.9819.C10 |
| Gene No. | 45872  | Strand  | -                    |
| Start    | 1  | End     | 5172                 |
| Name     | OJ990715_07.9819.C10.o2.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 4336   | End     | 5033                 |
| GI       | none   | Score   | 69                   |
| Exons    | 4336..4416, 4336..4392, 4657..4731, 4815..5033, 4817..5032 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22054                                      | Seq. ID | OJ990715_07.9819.C11 |
| Gene No. | 45873                                      | Strand  | +                    |
| Start    | 185  | End     | 1409                 |
| Name     | OJ990715_07.9819.C11.o1.gs                 | Method  | GENSCAN              |
| Start    | 185  | End     | 1409                 |
| GI       | none                                       | Score   | .74                  |
| Exons    | 185..289, 420..593, 1049..1147, 1227..1409 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22054 | Seq. ID | OJ990715_07.9819.C11 |
|----------|-------|---------|----------------------|

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Gene No.    | 45874   | Strand  | +                    |
| Start       | 3580  | End     | 3850                 |
| Name        | OJ990715_07.9819.C11.o2.np  | Method  | AAT/NAP              |
| Start       | 3580  | End     | 3850                 |
| GI          | 5902444   | Score   | 418                  |
| Exons       | 3580..3850  |         |                      |
| GI Descrip. | (AB030283) GAG-POL precursor [Oryza sativa]   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22054   | Seq. ID | OJ990715_07.9819.C11 |
| Gene No.    | 45875   | Strand  | -                    |
| Start       | 1544  | End     | 1716                 |
| Name        | OJ990715_07.9819.C11.o1.gp  | Method  | AAT/GAP              |
| Start       | 1544  | End     | 1716                 |
| GI          | LIB3477-003-P1-K1-E9  | Score   | 137                  |
| Exons       | 1544..1613, 1686..1716  |         |                      |
| GI Descrip. | '2498586/sp Q40638 MP01_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY S 1 PRECURSOR (ORY S I)>gi_1173557 (U31771) Ory s 1 [Oryza sativa]' |         |                      |
|             |   |         |                      |
| Seq. No.    | 22054   | Seq. ID | OJ990715_07.9819.C11 |
| Gene No.    | 45876   | Strand  |                      |
| Start       | 3586  | End     | 3849                 |
| Name        | OJ990715_07.9819.C11.o1.tw  | Method  | TBLASTX:Wheat        |
| Start       | 3586  | End     | 3849                 |
| GI          | none  | Score   | 255                  |
| Exons       | 3586..3849, 3591..3830, 3688..3849  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22055   | Seq. ID | OJ990715_07.9819.C12 |
| Gene No.    | 45877   | Strand  | +                    |
| Start       | 1   | End     | 1705                 |
| Name        | OJ990715_07.9819.C12.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1702                 |
| GI          | 4680180   | Score   | 2924                 |
| Exons       | 1..1702   |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica]   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22055   | Seq. ID | OJ990715_07.9819.C12 |
| Gene No.    | 45877   | Strand  | +                    |
| Start       | 1   | End     | 1705                 |
| Name        | OJ990715_07.9819.C12.o1.gs  | Method  | GENSCAN              |
| Start       | 153   | End     | 1705                 |
| GI          | none  | Score   | .7                   |
| Exons       | 153..1705   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22055   | Seq. ID | OJ990715_07.9819.C12 |
| Gene No.    | 45878   | Strand  | -                    |
| Start       | 2022  | End     | 2634                 |
| Name        | OJ990715_07.9819.C12.o3.tm  | Method  | TBLASTX:Maize        |
| Start       | 89  | End     | 343                  |
| GI          | none  | Score   | 193                  |
| Exons       | 89..343, 97..204  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22055   | Seq. ID | OJ990715_07.9819.C12 |
| Gene No.    | 45878   | Strand  | -                    |
| Start       | 2022  | End     | 2634                 |
| Name        | OJ990715_07.9819.C12.o3.tw  | Method  | TBLASTX:Wheat        |
| Start       | 107   | End     | 436                  |

|          |  |         |                      |
|----------|--|---------|----------------------|
| GI       | none   | Score   | 310                  |
| Exons    | 107..436, 109..216   |         |                      |
|          |  |         |                      |
| Seq. No. | 22055  | Seq. ID | OJ990715_07.9819.C12 |
| Gene No. | 45878  | Strand  | -                    |
| Start    | 2022   | End     | 2634                 |
| Name     | OJ990715_07.9819.C12.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 570  | End     | 934                  |
| GI       | none   | Score   | 68                   |
| Exons    | 570..788, 571..882, 572..895, 592..915, 886..933, 887..934 |         |                      |
|          |  |         |                      |
| Seq. No. | 22055  | Seq. ID | OJ990715_07.9819.C12 |
| Gene No. | 45878  | Strand  | -                    |
| Start    | 2022   | End     | 2634                 |
| Name     | OJ990715_07.9819.C12.o1.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 577  | End     | 964                  |
| GI       | none   | Score   | 420                  |
| Exons    | 577..888, 578..964, 779..964                               |         |                      |
|          |  |         |                      |
| Seq. No. | 22055  | Seq. ID | OJ990715_07.9819.C12 |
| Gene No. | 45878  | Strand  | -                    |
| Start    | 2022   | End     | 2634                 |
| Name     | OJ990715_07.9819.C12.o4.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 1036   | End     | 1309                 |
| GI       | none   | Score   | 95                   |
| Exons    | 1036..1143, 1037..1135, 1126..1200, 1130..1213, 1223..1309 |         |                      |
|          |  |         |                      |
| Seq. No. | 22055  | Seq. ID | OJ990715_07.9819.C12 |
| Gene No. | 45878  | Strand  | -                    |
| Start    | 2022   | End     | 2634                 |
| Name     | OJ990715_07.9819.C12.o2.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 1079   | End     | 1693                 |
| GI       | none   | Score   | 273                  |
| Exons    | 1079..1357, 1099..1188, 1240..1341, 1412..1570, 1556..1693 |         |                      |
|          |  |         |                      |
| Seq. No. | 22055  | Seq. ID | OJ990715_07.9819.C12 |
| Gene No. | 45878  | Strand  | -                    |
| Start    | 2022   | End     | 2634                 |
| Name     | OJ990715_07.9819.C12.o2.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 1421   | End     | 1654                 |
| GI       | none   | Score   | 140                  |
| Exons    | 1421..1573, 1522..1572, 1552..1653, 1553..1654             |         |                      |
|          |  |         |                      |
| Seq. No. | 22055  | Seq. ID | OJ990715_07.9819.C12 |
| Gene No. | 45878  | Strand  | -                    |
| Start    | 2022   | End     | 2634                 |
| Name     | OJ990715_07.9819.C12.o2.gs                                 | Method  | GENSCAN              |
| Start    | 2022   | End     | 2634                 |
| GI       | none   | Score   | .8                   |
| Exons    | 2022..2362, 2430..2471, 2544..2634                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22055  | Seq. ID | OJ990715_07.9819.C12 |
| Gene No. | 45878  | Strand  | -                    |
| Start    | 2022   | End     | 2634                 |
| Name     | OJ990715_07.9819.C12.o2.np                                 | Method  | AAT/NAP              |
| Start    | 2025   | End     | 2484                 |
| GI       | 5902446  | Score   | 699                  |

Exons 2025..2484  
GI Descrip. (AB030283) orf5 [Oryza sativa]

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No.    | 45879  | Strand  | +                    |
| Start       | 2926   | End     | 3387                 |
| Name        | OJ990715_07.9819.C13.o1.gp   | Method  | AAT/GAP              |
| Start       | 2926   | End     | 3387                 |
| GI          | uC-osflcyp177g01a1   | Score   | 240                  |
| Exons       | 2926..3088, 3353..3387   |         |                      |
| GI Descrip. | '4884864/gb AAD31846.1 AF133530_1 4.0e-12 (AF133530) water channel protein MipH [Mesembryanthemum crystallinum]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45880  | Strand  | +                    |
| Start    | 8849   | End     | 12320                |
| Name     | OJ990715_07.9819.C13.o3.gs                         | Method  | GENSCAN              |
| Start    | 8849   | End     | 12320                |
| GI       | none   | Score   | .82                  |
| Exons    | 8849..8992, 9414..9488, 10549..11295, 11334..12320 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22056                      | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45881                      | Strand  | +                    |
| Start    | 12906                      | End     | 13323                |
| Name     | OJ990715_07.9819.C13.o2.gp | Method  | AAT/GAP              |
| Start    | 12906                      | End     | 13323                |
| GI       | none                       | Score   | 804                  |
| Exons    | 12906..13323               |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No.    | 45882  | Strand  | +                    |
| Start       | 18096  | End     | 18370                |
| Name        | OJ990715_07.9819.C13.o5.gp   | Method  | AAT/GAP              |
| Start       | 18096  | End     | 18370                |
| GI          | 61605_3.R1084  | Score   | 294                  |
| Exons       | 18096..18370   |         |                      |
| GI Descrip. | '1402920/emb CAA66965  2.0e-20 (X98321) peroxidase [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45883  | Strand  | -                    |
| Start    | 15   | End     | 5301                 |
| Name     | OJ990715_07.9819.C13.o1.gs   | Method  | GENSCAN              |
| Start    | 15   | End     | 5301                 |
| GI       | none   | Score   | .74                  |
| Exons    | 15..644, 731..1065, 1486..1654, 3212..3426, 3568..3667, 3939..4099, 5193..5301 |         |                      |

|             |                                |         |                      |
|-------------|--------------------------------|---------|----------------------|
| Seq. No.    | 22056                          | Seq. ID | OJ990715_07.9819.C13 |
| Gene No.    | 45883                          | Strand  | -                    |
| Start       | 15                             | End     | 5301                 |
| Name        | OJ990715_07.9819.C13.o1.np     | Method  | AAT/NAP              |
| Start       | 722                            | End     | 1615                 |
| GI          | 5902448                        | Score   | 1564                 |
| Exons       | 722..1615                      |         |                      |
| GI Descrip. | (AB030283) orf3 [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45884  | Strand  | -                    |
| Start    | 7078   | End     | 7502                 |
| Name     | OJ990715_07.9819.C13.o2.gs   | Method  | GENSCAN              |
| Start    | 7078   | End     | 7502                 |
| GI       | none   | Score   | .51                  |
| Exons    | 7078..7190, 7256..7502   |         |                      |
|          |  |         |                      |
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 1205   | End     | 1495                 |
| GI       | none   | Score   | 215                  |
| Exons    | 1205..1495   |         |                      |
|          |  |         |                      |
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o6.tm   | Method  | TBLASTX:Maize        |
| Start    | 6575   | End     | 10611                |
| GI       | none   | Score   | 173                  |
| Exons    | 6575..6754, 6575..6754, 6576..6755, 10546..10611, 10546..10608, 10548..10610                                   |         |                      |
|          |  |         |                      |
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 6626   | End     | 10761                |
| GI       | none   | Score   | 128                  |
| Exons    | 6626..6709, 6630..6740, 10546..10761, 10548..10685   |         |                      |
|          |  |         |                      |
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 10614  | End     | 11282                |
| GI       | none   | Score   | 596                  |
| Exons    | 10614..11279, 10615..11280, 10622..10720, 10696..11115, 10769..11278, 10776..11282                             |         |                      |
|          |  |         |                      |
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 11282  | End     | 11622                |
| GI       | none   | Score   | 77                   |
| Exons    | 11282..11335, 11283..11336, 11284..11352, 11323..11490, 11328..11621, 11330..11617, 11332..11622, 11433..11621 |         |                      |
|          |  |         |                      |
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 11603  | End     | 12068                |
| GI       | none   | Score   | 199                  |



Exons 11603..11965, 11742..12068

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056                                    | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885                                    | Strand  | -                    |
| Start    | 13362                                    | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o4.tm               | Method  | TBLASTX:Maize        |
| Start    | 11678                                    | End     | 12068                |
| GI       | none                                     | Score   | 98                   |
| Exons    | 11678..11878; 11678..12067, 11679..12068 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o5.tm   | Method  | TBLASTX:Maize        |
| Start    | 12122  | End     | 12375                |
| GI       | none   | Score   | 46                   |
| Exons    | 12122..12166, 12126..12188, 12192..12374, 12199..12375, 12206..12364, 12229..12375 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 13359  | End     | 13908                |
| GI       | none   | Score   | 67                   |
| Exons    | 13359..13682, 13362..13511, 13510..13659, 13659..13907, 13660..13908, 13663..13908 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o4.gs   | Method  | GENSCAN              |
| Start    | 13362  | End     | 19109                |
| GI       | none   | Score   | .82                  |
| Exons    | 13362..13910, 13992..14119, 14530..14633, 15794..15948, 16111..16483, 18415..18542, 18861..19109 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o3.np   | Method  | AAT/NAP              |
| Start    | 13365  | End     | 19841                |
| GI       | 4836881  | Score   | 1140                 |
| Exons    | 13365..13910, 13992..14119, 14530..14633, 18415..18542, 19680..19841 |         |                      |

GI Descrip. (AC007260) lcl|prt\_seq No definition line found [Arabidopsis thaliana]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 13522  | End     | 18516                |
| GI       | none   | Score   | 108                  |
| Exons    | 13522..13644, 13527..13643, 13641..13922, 13642..13911, 13972..14121, 13974..14120, 14528..14632, 14529..14633, 14529..14678, 18411..18515, 18417..18515, 18418..18516 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 13807  | End     | 18510                |
| GI       | none   | Score   | 81                   |
| Exons    | 13807..13911, 13809..13922, 13972..14121, 13974..14120,<br>13978..14121, 14502..14633, 14527..14634, 14528..14635,<br>18417..18509, 18418..18510 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22056  | Seq. ID | OJ990715_07.9819.C13 |
| Gene No. | 45885  | Strand  | -                    |
| Start    | 13362  | End     | 19841                |
| Name     | OJ990715_07.9819.C13.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 13972  | End     | 18554                |
| GI       | none   | Score   | 156                  |
| Exons    | 13972..14142, 13974..14120, 13978..14121, 14501..14644,<br>14502..14648, 18417..18542, 18418..18540, 18422..18550,<br>18480..18554 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22056   | Seq. ID | OJ990715_07.9819.C13 |
| Gene No.    | 45885   | Strand  | -                    |
| Start       | 13362   | End     | 19841                |
| Name        | OJ990715_07.9819.C13.o3.gp  | Method  | AAT/GAP              |
| Start       | 16367   | End     | 17101                |
| GI          | 101153_1.R1084  | Score   | 390                  |
| Exons       | 16367..16395, 16872..17101  |         |                      |
| GI Descrip. | '5852170/emb AL117265.1 OST17804 1.0e-115 Oryza sativa<br>indica(GLA4) genomic DNA, chromosome 4, BAC clone:t17804' |         |                      |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22057  | Seq. ID | OJ990405_09.9819.C2 |
| Gene No.    | 45886  | Strand  | +                   |
| Start       | 1  | End     | 662                 |
| Name        | OJ990405_09.9819.C2.o1.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 399                 |
| GI          | 5922619  | Score   | 95                  |
| Exons       | 1..145, 300..399   |         |                     |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6016852 dbj BAA85195.1  (AP000570) hypothetical protein<br>[Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22057                     | Seq. ID | OJ990405_09.9819.C2 |
| Gene No. | 45886                     | Strand  | +                   |
| Start    | 1                         | End     | 662                 |
| Name     | OJ990405_09.9819.C2.o1.gs | Method  | GENSCAN             |
| Start    | 154                       | End     | 662                 |
| GI       | none                      | Score   | .75                 |
| Exons    | 154..268, 562..662        |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22057                     | Seq. ID | OJ990405_09.9819.C2 |
| Gene No. | 45887                     | Strand  | -                   |
| Start    | 539                       | End     | 618                 |
| Name     | OJ990405_09.9819.C2.o2.np | Method  | AAT/NAP             |
| Start    | 539                       | End     | 618                 |
| GI       | 6630699                   | Score   | 74                  |
| Exons    | 539..618                  |         |                     |

GI Descrip. (AP000969) hypothetical protein [Oryza sativa]  
gi|6721536|dbj|BAA89566.1| (AP001073) hypothetical protein  
[Oryza sativa]

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22058  | Seq. ID | OJ990405_09.9819.C3 |
| Gene No.    | 45888  | Strand  | -                   |
| Start       | 1  | End     | 803                 |
| Name        | OJ990405_09.9819.C3.ol.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 803                 |
| GI          | 2443887  | Score   | 85                  |
| Exons       | 1..95, 535..803  |         |                     |
| GI Descrip. | (AC002294) Similar to transcription factor gb Z46606 1658307 and others [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22058  | Seq. ID | OJ990405_09.9819.C3 |
| Gene No. | 45888  | Strand  | -                   |
| Start    | 1  | End     | 803                 |
| Name     | OJ990405_09.9819.C3.ol.tm  | Method  | TBLASTX:Maize       |
| Start    | 505  | End     | 729                 |
| GI       | none   | Score   | 147                 |
| Exons    | 505..639, 515..658, 519..659, 522..659, 650..700, 654..698, 656..703, 703..729 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22059   | Seq. ID | OJ990405_09.9819.C4 |
| Gene No.    | 45889   | Strand  | +                   |
| Start       | 1408  | End     | 1654                |
| Name        | OJ990405_09.9819.C4.ol.gp   | Method  | AAT/GAP             |
| Start       | 1408  | End     | 1654                |
| GI          | 13626_1.R1084   | Score   | 435                 |
| Exons       | 1408..1654  |         |                     |
| GI Descrip. | '6069643/dbj AP000616.1 AP000616 1.0e-152 Oryza sativa genomic DNA, chromosome 6, clone:P0514G12' |         |                     |

|          |                                       |         |                     |
|----------|---------------------------------------|---------|---------------------|
| Seq. No. | 22060                                 | Seq. ID | OJ990405_09.9819.C5 |
| Gene No. | 45890                                 | Strand  | +                   |
| Start    | 28                                    | End     | 702                 |
| Name     | OJ990405_09.9819.C5.ol.gs             | Method  | GENSCAN             |
| Start    | 28                                    | End     | 702                 |
| GI       | none                                  | Score   | .79                 |
| Exons    | 28..108, 194..276, 385..437, 536..702 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22060                     | Seq. ID | OJ990405_09.9819.C5 |
| Gene No. | 45890                     | Strand  | +                   |
| Start    | 28                        | End     | 702                 |
| Name     | OJ990405_09.9819.C5.ol.gp | Method  | AAT/GAP             |
| Start    | 403                       | End     | 661                 |
| GI       | none                      | Score   | 229                 |
| Exons    | 403..437, 536..661        |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22061                     | Seq. ID | OJ990405_09.9819.C6 |
| Gene No. | 45891                     | Strand  | +                   |
| Start    | 510                       | End     | 596                 |
| Name     | OJ990405_09.9819.C6.ol.gp | Method  | AAT/GAP             |
| Start    | 510                       | End     | 596                 |
| GI       | none                      | Score   | 120                 |
| Exons    | 510..596                  |         |                     |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22062   | Seq. ID | OJ990405_09.9819.C7  |
| Gene No.    | 45892   | Strand  | +                    |
| Start       | 149   | End     | 1281                 |
| Name        | OJ990405_09.9819.C7.o1.gs   | Method  | GENSCAN              |
| Start       | 149   | End     | 950                  |
| GI          | none  | Score   | .94                  |
| Exons       | 149..383, 475..616, 820..950  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22062   | Seq. ID | OJ990405_09.9819.C7  |
| Gene No.    | 45892   | Strand  | +                    |
| Start       | 149   | End     | 1281                 |
| Name        | OJ990405_09.9819.C7.o1.gp   | Method  | AAT/GAP              |
| Start       | 468   | End     | 1281                 |
| GI          | 33640_1.R1084   | Score   | 1065                 |
| Exons       | 468..616, 820..1281   |         |                      |
| GI Descrip. | '6069643/dbj AP000616.1 AP000616 1.0e-152 Oryza sativa genomic DNA, chromosome 6, clone:P0514G12' |         |                      |
|             |   |         |                      |
| Seq. No.    | 22063   | Seq. ID | OJ990405_09.9819.C8  |
| Gene No.    | 45893   | Strand  | +                    |
| Start       | 1106  | End     | 1616                 |
| Name        | OJ990405_09.9819.C8.o1.gs   | Method  | GENSCAN              |
| Start       | 1106  | End     | 1616                 |
| GI          | none  | Score   | .81                  |
| Exons       | 1106..1279, 1611..1616  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22063   | Seq. ID | OJ990405_09.9819.C8  |
| Gene No.    | 45894   | Strand  | +                    |
| Start       | 6370  | End     | 7930                 |
| Name        | OJ990405_09.9819.C8.o1.np   | Method  | AAT/NAP              |
| Start       | 6370  | End     | 7930                 |
| GI          | 4680186   | Score   | 177                  |
| Exons       | 6370..6531, 7113..7246, 7877..7930  |         |                      |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica]   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22063   | Seq. ID | OJ990405_09.9819.C8  |
| Gene No.    | 45895   | Strand  | -                    |
| Start       | 6671  | End     | 7097                 |
| Name        | OJ990405_09.9819.C8.o1.gp   | Method  | AAT/GAP              |
| Start       | 6671  | End     | 7097                 |
| GI          | 4878407   | Score   | 678                  |
| Exons       | 6671..7097  |         |                      |
| GI Descrip. | 6069643/dbj AP000616.1 AP000616 1.0e-152 Oryza sativa genomic DNA, chromosome 6, clone:P0514G12   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22064   | Seq. ID | OJ990405_09.9819.C9  |
| Gene No.    | 45896   | Strand  | +                    |
| Start       | 97  | End     | 413                  |
| Name        | OJ990405_09.9819.C9.o1.gs   | Method  | GENSCAN              |
| Start       | 97  | End     | 413                  |
| GI          | none  | Score   | .54                  |
| Exons       | 97..198, 229..413   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22065   | Seq. ID | OJ990405_09.9819.C10 |
| Gene No.    | 45897   | Strand  | +                    |
| Start       | 749   | End     | 1044                 |
| Name        | OJ990405_09.9819.C10.o1.gp  | Method  | AAT/GAP              |

|             |   |       |      |
|-------------|---|-------|------|
| Start       | 749   | End   | 1044 |
| GI          | 754_1.R1084   | Score | 541  |
| Exons       | 749..1044   |       |      |
| GI Descrip. | '2267597 5.0e-46 (AF009413) 10 kDa chaperonin [Oryza sativa]' |       |      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22065  | Seq. ID | OJ990405_09.9819.C10 |
| Gene No. | 45898  | Strand  | +                    |
| Start    | 3420   | End     | 5171                 |
| Name     | OJ990405_09.9819.C10.o2.gs                     | Method  | GENSCAN              |
| Start    | 3420   | End     | 5171                 |
| GI       | none   | Score   | .79                  |
| Exons    | 3420..3438, 4463..4563, 4612..4767, 4929..5171 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22065                      | Seq. ID | OJ990405_09.9819.C10 |
| Gene No. | 45899                      | Strand  | +                    |
| Start    | 6894                       | End     | 7529                 |
| Name     | OJ990405_09.9819.C10.o3.gp | Method  | AAT/GAP              |
| Start    | 6894                       | End     | 7529                 |
| GI       | none                       | Score   | 686                  |
| Exons    | 6894..6924, 7060..7529     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22065                      | Seq. ID | OJ990405_09.9819.C10 |
| Gene No. | 45900                      | Strand  | -                    |
| Start    | 432                        | End     | 770                  |
| Name     | OJ990405_09.9819.C10.o1.gs | Method  | GENSCAN              |
| Start    | 432                        | End     | 770                  |
| GI       | none                       | Score   | .77                  |
| Exons    | 432..586, 714..770         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22065  | Seq. ID | OJ990405_09.9819.C10 |
| Gene No. | 45901  | Strand  | -                    |
| Start    | 1544   | End     | 5008                 |
| Name     | OJ990405_09.9819.C10.o2.gp   | Method  | AAT/GAP              |
| Start    | 1544   | End     | 5008                 |
| GI       | none   | Score   | 1334                 |
| Exons    | 1544..1887, 1975..2034, 2498..2538, 3701..3734, 3815..3865, 4806..5008 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22065                      | Seq. ID | OJ990405_09.9819.C10 |
| Gene No. | 45902                      | Strand  | -                    |
| Start    | 6217                       | End     | 6871                 |
| Name     | OJ990405_09.9819.C10.o3.gs | Method  | GENSCAN              |
| Start    | 6217                       | End     | 6871                 |
| GI       | none                       | Score   | .65                  |
| Exons    | 6217..6495, 6644..6871     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22065  | Seq. ID | OJ990405_09.9819.C10 |
| Gene No. | 45903  | Strand  | -                    |
| Start    | 8652   | End     | 14075                |
| Name     | OJ990405_09.9819.C10.o4.gs   | Method  | GENSCAN              |
| Start    | 8652   | End     | 14075                |
| GI       | none   | Score   | .71                  |
| Exons    | 8652..8839, 9491..9647, 9685..9974, 10135..10319, 12789..12868, 12936..13016, 13107..13686, 13769..13923, 14005..14075 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22065 | Seq. ID | OJ990405_09.9819.C10 |
| Gene No. | 45903 | Strand  | -                    |

|       |  |        |         |
|-------|--|--------|---------|
| Start | 8652   | End    | 14075   |
| Name  | OJ990405_09.9819.C10.o4.gp                             | Method | AAT/GAP |
| Start | 12300  | End    | 13012   |
| GI    | none   | Score  | 837     |
| Exons | 12300..12534, 12631..12705, 12789..12868, 12936..13012 |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22066                      | Seq. ID | OJ990405_09.9819.C11 |
| Gene No. | 45904                      | Strand  | -                    |
| Start    | 69                         | End     | 171                  |
| Name     | OJ990405_09.9819.C11.o1.gs | Method  | GENSCAN              |
| Start    | 69                         | End     | 171                  |
| GI       | none                       | Score   | .64                  |
| Exons    | 69..171                    |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22066                        | Seq. ID | OJ990405_09.9819.C11 |
| Gene No. | 45905                        | Strand  | -                    |
| Start    | 324                          | End     | 769                  |
| Name     | OJ990405_09.9819.C11.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 324                          | End     | 769                  |
| GI       | none                         | Score   | 66                   |
| Exons    | 324..518, 374..529, 626..769 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22067  | Seq. ID | OJ990405_09.9819.C12 |
| Gene No.    | 45906  | Strand  | -                    |
| Start       | 1  | End     | 395                  |
| Name        | OJ990405_09.9819.C12.o1.np                             | Method  | AAT/NAP              |
| Start       | 1  | End     | 395                  |
| GI          | 4585985  | Score   | 288                  |
| Exons       | 1..395   |         |                      |
| GI Descrip. | (AC005287) Hypothetical protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22068                      | Seq. ID | OJ990405_09.9819.C13 |
| Gene No. | 45907                      | Strand  | -                    |
| Start    | 47                         | End     | 1555                 |
| Name     | OJ990405_09.9819.C13.o1.gs | Method  | GENSCAN              |
| Start    | 47                         | End     | 1555                 |
| GI       | none                       | Score   | .76                  |
| Exons    | 47..266, 1454..1555        |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22069                      | Seq. ID | OJ990405_09.9819.C14 |
| Gene No. | 45908                      | Strand  | +                    |
| Start    | 306                        | End     | 2180                 |
| Name     | OJ990405_09.9819.C14.o1.gs | Method  | GENSCAN              |
| Start    | 306                        | End     | 2180                 |
| GI       | none                       | Score   | .81                  |
| Exons    | 306..315, 1957..2180       |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22069                                     | Seq. ID | OJ990405_09.9819.C14 |
| Gene No.    | 45909                                     | Strand  | -                    |
| Start       | 263                                       | End     | 3842                 |
| Name        | OJ990405_09.9819.C14.o1.np                | Method  | AAT/NAP              |
| Start       | 263                                       | End     | 3732                 |
| GI          | 4234852                                   | Score   | 2230                 |
| Exons       | 263..3522, 3556..3732                     |         |                      |
| GI Descrip. | (AF082133) gag-pol polyprotein [Zea mays] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22069 | Seq. ID | OJ990405_09.9819.C14 |
|----------|-------|---------|----------------------|

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 45909  | Strand  | -                    |
| Start       | 263  | End     | 3842                 |
| Name        | OJ990405_09.9819.C14.o2.tw   | Method  | TBLASTX:Wheat        |
| Start       | 314  | End     | 710                  |
| GI          | none   | Score   | 81                   |
| Exons       | 314..529, 537..710, 538..678   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22069  | Seq. ID | OJ990405_09.9819.C14 |
| Gene No.    | 45909  | Strand  | -                    |
| Start       | 263  | End     | 3842                 |
| Name        | OJ990405_09.9819.C14.o2.ts   | Method  | TBLASTX:Soybean      |
| Start       | 317  | End     | 883                  |
| GI          | none   | Score   | 85                   |
| Exons       | 317..508, 537..683, 731..883   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22069  | Seq. ID | OJ990405_09.9819.C14 |
| Gene No.    | 45909  | Strand  | -                    |
| Start       | 263  | End     | 3842                 |
| Name        | OJ990405_09.9819.C14.o2.tm   | Method  | TBLASTX:Maize        |
| Start       | 779  | End     | 1063                 |
| GI          | none   | Score   | 80                   |
| Exons       | 779..1063, 789..929  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22069  | Seq. ID | OJ990405_09.9819.C14 |
| Gene No.    | 45909  | Strand  | -                    |
| Start       | 263  | End     | 3842                 |
| Name        | OJ990405_09.9819.C14.o1.tw   | Method  | TBLASTX:Wheat        |
| Start       | 869  | End     | 1652                 |
| GI          | none   | Score   | 66                   |
| Exons       | 869..1075, 873..1067, 1008..1244, 1044..1235, 1054..1236, 1054..1272, 1279..1362, 1367..1633, 1368..1616, 1614..1652 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22069  | Seq. ID | OJ990405_09.9819.C14 |
| Gene No.    | 45909  | Strand  | -                    |
| Start       | 263  | End     | 3842                 |
| Name        | OJ990405_09.9819.C14.o3.tm   | Method  | TBLASTX:Maize        |
| Start       | 1186   | End     | 1633                 |
| GI          | none   | Score   | 87                   |
| Exons       | 1186..1272, 1358..1633, 1368..1616   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22069  | Seq. ID | OJ990405_09.9819.C14 |
| Gene No.    | 45909  | Strand  | -                    |
| Start       | 263  | End     | 3842                 |
| Name        | OJ990405_09.9819.C14.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 1358   | End     | 1780                 |
| GI          | 5509260  | Score   | 107                  |
| Exons       | 1358..1633, 1419..1652, 1614..1772, 1748..1780   |         |                      |
| GI Descrip. | -  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22069  | Seq. ID | OJ990405_09.9819.C14 |
| Gene No.    | 45909  | Strand  | -                    |
| Start       | 263  | End     | 3842                 |
| Name        | OJ990405_09.9819.C14.o1.gp   | Method  | AAT/GAP              |
| Start       | 2526   | End     | 3099                 |
| GI          | uC-osflcyp006a10b1   | Score   | 842                  |
| Exons       | 2526..2777, 2885..3099   |         |                      |
| GI Descrip. | '4234846 7.0e-13 (AF082130) gag-pol polyprotein [Zea mays]'  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22069  | Seq. ID | OJ990405_09.9819.C14 |
| Gene No. | 45909  | Strand  | -                    |
| Start    | 263  | End     | 3842                 |
| Name     | OJ990405_09.9819.C14.o1.tm                     | Method  | TBLASTX:Maize        |
| Start    | 2719   | End     | 3639                 |
| GI       | none   | Score   | 113                  |
| Exons    | 2719..2781, 3037..3315, 3061..3639, 3071..3517 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22069   | Seq. ID | OJ990405_09.9819.C14 |
| Gene No.    | 45909   | Strand  | -                    |
| Start       | 263   | End     | 3842                 |
| Name        | OJ990405_09.9819.C14.o2.gp                                  | Method  | AAT/GAP              |
| Start       | 3331  | End     | 3842                 |
| GI          | uC-osflM202052c07b1   | Score   | 995                  |
| Exons       | 3331..3842  |         |                      |
| GI Descrip. | '4234848 1.0e-12 (AF082131) gag-pol polyprotein [Zea mays]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22070                      | Seq. ID | OJ990405_09.9819.C15 |
| Gene No. | 45910                      | Strand  | -                    |
| Start    | 493                        | End     | 1220                 |
| Name     | OJ990405_09.9819.C15.o1.gs | Method  | GENSCAN              |
| Start    | 493                        | End     | 1220                 |
| GI       | none                       | Score   | .54                  |
| Exons    | 493..738, 1100..1220       |         |                      |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22071                            | Seq. ID | OJ990405_09.9819.C16 |
| Gene No. | 45911                            | Strand  | +                    |
| Start    | 505                              | End     | 1443                 |
| Name     | OJ990405_09.9819.C16.o1.gs       | Method  | GENSCAN              |
| Start    | 505                              | End     | 1443                 |
| GI       | none                             | Score   | .6                   |
| Exons    | 505..796, 1037..1140, 1297..1443 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45912  | Strand  | +                    |
| Start    | 615  | End     | 2403                 |
| Name     | OJ990405_09.9819.C17.o1.gs                   | Method  | GENSCAN              |
| Start    | 615  | End     | 2403                 |
| GI       | none   | Score   | .63                  |
| Exons    | 615..682, 1628..1838, 1878..1998, 2096..2403 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22072                      | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45913                      | Strand  | +                    |
| Start    | 3994                       | End     | 4151                 |
| Name     | OJ990405_09.9819.C17.o2.gs | Method  | GENSCAN              |
| Start    | 3994                       | End     | 4151                 |
| GI       | none                       | Score   | .65                  |
| Exons    | 3994..4065, 4107..4151     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22072                              | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45914                              | Strand  | +                    |
| Start    | 6971                               | End     | 7842                 |
| Name     | OJ990405_09.9819.C17.o3.gs         | Method  | GENSCAN              |
| Start    | 6971                               | End     | 7842                 |
| GI       | none                               | Score   | .75                  |
| Exons    | 6971..7186, 7439..7592, 7814..7842 |         |                      |



|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45915  | Strand  | +                    |
| Start    | 9043   | End     | 13596                |
| Name     | OJ990405_09.9819.C17.o4.gs   | Method  | GENSCAN              |
| Start    | 9043   | End     | 13596                |
| GI       | none   | Score   | .57                  |
| Exons    | 9043..9243, 9515..10245, 10824..11149, 11242..11426,<br>11519..11689, 12274..12474, 12789..13040, 13138..13596 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No.    | 45915  | Strand  | +                    |
| Start       | 9043   | End     | 13596                |
| Name        | OJ990405_09.9819.C17.o2.np   | Method  | AAT/NAP              |
| Start       | 9383   | End     | 13506                |
| GI          | 6330235  | Score   | 1767                 |
| Exons       | 9383..10051, 10127..10245, 10824..11136, 11238..11426,<br>11519..11680, 12265..12482, 12800..13124, 13220..13506 |         |                      |
| GI Descrip. | (AB033003) KIAA1177 protein [Homo sapiens]   |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No.    | 45915   | Strand  | +                    |
| Start       | 9043  | End     | 13596                |
| Name        | OJ990405_09.9819.C17.o1.gp  | Method  | AAT/GAP              |
| Start       | 11065   | End     | 11604                |
| GI          | 4878395   | Score   | 642                  |
| Exons       | 11065..11149, 11242..11426, 11519..11604  |         |                      |
| GI Descrip. | 1707032 2.0e-15 (U80445) coded for by C. elegans cDNA yk13g5.3;<br>coded for by C. elegans cDNA yk21g6.3; coded for by C. elegans<br>cDNA CEMSE18F; coded for by C. elegans cDNA yk126b1.3; coded for<br>by C. elegans cDNA yk65h8.3; coded for by C. elegans cDNA yk65h8 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45916  | Strand  | +                    |
| Start    | 24213  | End     | 26611                |
| Name     | OJ990405_09.9819.C17.o6.gs                             | Method  | GENSCAN              |
| Start    | 24213  | End     | 26611                |
| GI       | none   | Score   | .68                  |
| Exons    | 24213..24677, 25816..25990, 26150..26427, 26504..26611 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No.    | 45916  | Strand  | +                    |
| Start       | 24213  | End     | 26611                |
| Name        | OJ990405_09.9819.C17.o5.gp   | Method  | AAT/GAP              |
| Start       | 25203  | End     | 25566                |
| GI          | uC-osrocyp031c04b1   | Score   | 597                  |
| Exons       | 25203..25566   |         |                      |
| GI Descrip. | '1707032 2.0e-15 (U80445) coded for by C. elegans cDNA yk13g5.3;<br>coded for by C. elegans cDNA yk21g6.3; coded for by C. elegans<br>cDNA CEMSE18F; coded for by C. elegans cDNA yk126b1.3; coded for<br>by C. elegans cDNA yk65h8.3; coded for by C. elegans cDNA<br>yk65h8' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22072                      | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45916                      | Strand  | +                    |
| Start    | 24213                      | End     | 26611                |
| Name     | OJ990405_09.9819.C17.o6.gp | Method  | AAT/GAP              |

|             |  |       |       |
|-------------|--|-------|-------|
| Start       | 25941  | End   | 26605 |
| GI          | 35649_1.R1084  | Score | 610   |
| Exons       | 25941..25990, 26150..26427, 26504..26605   |       |       |
| GI Descrip. | '4454038/emb CAA23035.1  4.0e-29 (AL035394) putative disease resistance response protein [Arabidopsis thaliana]' |       |       |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No.    | 45917   | Strand  | +                    |
| Start       | 35188   | End     | 36360                |
| Name        | OJ990405_09.9819.C17.o6.np                        | Method  | AAT/NAP              |
| Start       | 35188   | End     | 36360                |
| GI          | 2979555   | Score   | 170                  |
| Exons       | 35188..35276, 36029..36360                        |         |                      |
| GI Descrip. | (AC003680) unknown protein [Arabidopsis thaliana] |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22072                       | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45917                       | Strand  | +                    |
| Start    | 35188                       | End     | 36360                |
| Name     | OJ990405_09.9819.C17.o10.gs | Method  | GENSCAN              |
| Start    | 35834                       | End     | 36352                |
| GI       | none                        | Score   | .47                  |
| Exons    | 35834..36352                |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No.    | 45918   | Strand  | -                    |
| Start       | 13579   | End     | 13953                |
| Name        | OJ990405_09.9819.C17.o2.gp  | Method  | AAT/GAP              |
| Start       | 13579   | End     | 13953                |
| GI          | uC-osflM202063e08a1   | Score   | 619                  |
| Exons       | 13579..13953  |         |                      |
| GI Descrip. | '4335739/gb AAD17417  3.0e-11 (AC006248) hypothetical protein [Arabidopsis thaliana]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No.    | 45919   | Strand  | -                    |
| Start       | 14054   | End     | 24617                |
| Name        | OJ990405_09.9819.C17.o3.gp  | Method  | AAT/GAP              |
| Start       | 14054   | End     | 14748                |
| GI          | 3768640   | Score   | 1073                 |
| Exons       | 14054..14508, 14590..14748  |         |                      |
| GI Descrip. | 4335739/gb AAD17417  3.0e-11 (AC006248) hypothetical protein [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No.    | 45919  | Strand  | -                    |
| Start       | 14054  | End     | 24617                |
| Name        | OJ990405_09.9819.C17.o3.np   | Method  | AAT/NAP              |
| Start       | 14419  | End     | 16750                |
| GI          | 6562002  | Score   | 644                  |
| Exons       | 14419..14508, 14590..14745, 15144..15323, 15735..15988, 16640..16750 |         |                      |
| GI Descrip. | (AL133363) hypothetical protein [Arabidopsis thaliana]               |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22072                      | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45919                      | Strand  | -                    |
| Start    | 14054                      | End     | 24617                |
| Name     | OJ990405_09.9819.C17.o5.gs | Method  | GENSCAN              |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 14563  | End   | 23343 |
| GI    | none   | Score | .88   |
| Exons | 14563..14745, 15144..15323, 15735..15993, 16094..16221,<br>18358..18433, 18671..18857, 19840..19863, 20342..20614,<br>22098..23343 |       |       |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22072                                    | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45919                                    | Strand  | -                    |
| Start    | 14054                                    | End     | 24617                |
| Name     | OJ990405_09.9819.C17.o4.gp               | Method  | AAT/GAP              |
| Start    | 16083                                    | End     | 17213                |
| GI       | 701288                                   | Score   | 740                  |
| Exons    | 16083..16332, 16408..16509, 17112..17213 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No.    | 45919   | Strand  | -                    |
| Start       | 14054   | End     | 24617                |
| Name        | OJ990405_09.9819.C17.o4.np  | Method  | AAT/NAP              |
| Start       | 21852   | End     | 24617                |
| GI          | 2623309   | Score   | 354                  |
| Exons       | 21852..21918, 22103..23213, 24581..24617  |         |                      |
| GI Descrip. | (AC002409) putative TGACG-sequence-specific bZIP DNA-binding protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22072                      | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45920                      | Strand  | -                    |
| Start    | 27374                      | End     | 27997                |
| Name     | OJ990405_09.9819.C17.o7.gs | Method  | GENSCAN              |
| Start    | 27374                      | End     | 27997                |
| GI       | none                       | Score   | .89                  |
| Exons    | 27374..27997               |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22072                                       | Seq. ID | OJ990405_09.9819.C17 |
| Gene No.    | 45920                                       | Strand  | -                    |
| Start       | 27374                                       | End     | 27997                |
| Name        | OJ990405_09.9819.C17.o5.np                  | Method  | AAT/NAP              |
| Start       | 27380                                       | End     | 27979                |
| GI          | 6694699                                     | Score   | 381                  |
| Exons       | 27380..27979                                |         |                      |
| GI Descrip. | (AF210064) dirigent protein [Thuja plicata] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921  | Strand  | -                    |
| Start    | 30138  | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 9995   | End     | 11380                |
| GI       | none   | Score   | 289                  |
| Exons    | 9995..10021, 10067..10108, 10070..10246, 10095..10259,<br>10810..10995, 10821..11147, 10821..11147, 10822..11148,<br>10930..11118, 11240..11314, 11241..11315, 11270..11380,<br>11301..11378, 11318..11380 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22072                      | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921                      | Strand  | -                    |
| Start    | 30138                      | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o5.tc | Method  | TBLASTX:Cress        |
| Start    | 10088                      | End     | 10976                |

|          |  |         |                      |
|----------|--|---------|----------------------|
| GI       | none   | Score   | 195                  |
| Exons    | 10088..10246, 10822..10971, 10824..10976   |         |                      |
| Seq. No. | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921  | Strand  | -                    |
| Start    | 30138  | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 11080  | End     | 11635                |
| GI       | none   | Score   | 79                   |
| Exons    | 11080..11148, 11091..11141, 11239..11382, 11239..11427,<br>11240..11431, 11243..11428, 11244..11465, 11506..11622,<br>11511..11624, 11511..11624, 11516..11635 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921   | Strand  | -                    |
| Start    | 30138   | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o2.tm  | Method  | TBLASTX:Maize        |
| Start    | 11518   | End     | 13696                |
| GI       | none  | Score   | 82                   |
| Exons    | 11518..11580, 11519..11578, 11523..11582, 11555..11689,<br>11579..11689, 11586..11699, 12270..12470, 12271..12489,<br>12272..12469, 12273..12509, 12780..12929, 12787..12933,<br>12787..12924, 12788..12925, 12930..13040, 12932..13039,<br>12933..13040, 13135..13263, 13135..13260, 13136..13261,<br>13143..13262, 13284..13349, 13318..13341, 13403..13525,<br>13450..13536, 13504..13605, 13542..13598, 13636..13689,<br>13638..13655, 13670..13696 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921  | Strand  | -                    |
| Start    | 30138  | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o2.ts                             | Method  | TBLASTX:Soybean      |
| Start    | 12268  | End     | 12860                |
| GI       | none   | Score   | 278                  |
| Exons    | 12268..12489, 12273..12512, 12780..12860, 12788..12856 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921   | Strand  | -                    |
| Start    | 30138   | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o3.tc  | Method  | TBLASTX:Cress        |
| Start    | 12906   | End     | 13262                |
| GI       | none  | Score   | 190                  |
| Exons    | 12906..13040, 12907..13047, 12914..13039, 13135..13230,<br>13135..13224, 13227..13262, 13228..13260 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921   | Strand  | -                    |
| Start    | 30138   | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o6.tm  | Method  | TBLASTX:Maize        |
| Start    | 14326   | End     | 14716                |
| GI       | none  | Score   | 154                  |
| Exons    | 14326..14508, 14327..14515, 14572..14715, 14585..14713,<br>14588..14716 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22072 | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921 | Strand  | -                    |
| Start    | 30138 | End     | 30425                |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Name     | OJ990405_09.9819.C17.o4.tc  | Method  | TBLASTX:Cress        |
| Start    | 14356   | End     | 15287                |
| GI       | none  | Score   | 81                   |
| Exons    | 14356..14505, 14359..14508, 14572..14748, 15123..15287  |         |                      |
|          |   |         |                      |
| Seq. No. | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921   | Strand  | -                    |
| Start    | 30138   | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o4.ts  | Method  | TBLASTX:Soybean      |
| Start    | 14392   | End     | 15218                |
| GI       | none  | Score   | 76                   |
| Exons    | 14392..14505, 14572..14724, 14572..14751, 15123..15218  |         |                      |
|          |   |         |                      |
| Seq. No. | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921   | Strand  | -                    |
| Start    | 30138   | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o9.tm  | Method  | TBLASTX:Maize        |
| Start    | 15153   | End     | 15813                |
| GI       | none  | Score   | 75                   |
| Exons    | 15153..15326, 15156..15317, 15735..15812, 15736..15813  |         |                      |
|          |   |         |                      |
| Seq. No. | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921   | Strand  | -                    |
| Start    | 30138   | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 15219   | End     | 16119                |
| GI       | none  | Score   | 72                   |
| Exons    | 15219..15326, 15231..15326, 15728..15808, 15730..15807, 15735..15995, 15735..15995, 15736..16014, 16090..16119  |         |                      |
|          |   |         |                      |
| Seq. No. | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921   | Strand  | -                    |
| Start    | 30138   | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o8.tm  | Method  | TBLASTX:Maize        |
| Start    | 15814   | End     | 16163                |
| GI       | none  | Score   | 215                  |
| Exons    | 15814..15996, 15819..15992, 16095..16163, 16096..16146  |         |                      |
|          |   |         |                      |
| Seq. No. | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921   | Strand  | -                    |
| Start    | 30138   | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o5.tm  | Method  | TBLASTX:Maize        |
| Start    | 20154   | End     | 20457                |
| GI       | none  | Score   | 196                  |
| Exons    | 20154..20363, 20158..20337, 20160..20366, 20376..20456, 20382..20453, 20389..20457, 20392..20457  |         |                      |
|          |   |         |                      |
| Seq. No. | 22072   | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921   | Strand  | -                    |
| Start    | 30138   | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o3.tm  | Method  | TBLASTX:Maize        |
| Start    | 20463   | End     | 22711                |
| GI       | none  | Score   | 96                   |
| Exons    | 20463..20612, 20478..20615, 20494..20616, 22096..22188, 22097..22186, 22100..22189, 22102..22188, 22112..22162, 22189..22251, 22189..22269, 22190..22261, 22264..22683, 22266..22355, 22297..22623, 22316..22681, 22624..22710, |         |                      |

22652..22711

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921  | Strand  | -                    |
| Start    | 30138  | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 24492  | End     | 26397                |
| GI       | none   | Score   | 186                  |
| Exons    | 24492..24617, 24494..24652, 25803..25976, 25813..25974, 25816..25989, 25823..25975, 26155..26397, 26159..26245, 26160..26378, 26296..26397 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921  | Strand  | -                    |
| Start    | 30138  | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 25794  | End     | 26685                |
| GI       | none   | Score   | 190                  |
| Exons    | 25794..25976, 25794..25988, 25813..25995, 25816..25995, 25871..25996, 26149..26430, 26154..26381, 26155..26469, 26279..26431, 26493..26645, 26500..26685, 26501..26587, 26502..26621 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45921  | Strand  | -                    |
| Start    | 30138  | End     | 30425                |
| Name     | OJ990405_09.9819.C17.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 27371  | End     | 30425                |
| GI       | none   | Score   | 186                  |
| Exons    | 27371..27649, 27381..27650, 27701..27736, 27824..27871, 30141..30425, 30166..30351 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No.    | 45921  | Strand  | -                    |
| Start       | 30138  | End     | 30425                |
| Name        | OJ990405_09.9819.C17.o7.gp   | Method  | AAT/GAP              |
| Start       | 30138  | End     | 30396                |
| GI          | 4969019  | Score   | 470                  |
| Exons       | 30138..30396   |         |                      |
| GI Descrip. | 4454038/emb CAA23035.1  4.0e-29 (AL035394) putative disease resistance response protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22072  | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45922  | Strand  | -                    |
| Start    | 35914  | End     | 36358                |
| Name     | OJ990405_09.9819.C17.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 35914  | End     | 36346                |
| GI       | none   | Score   | 109                  |
| Exons    | 35914..36009, 35915..35995, 36020..36109, 36031..36105, 36157..36204, 36158..36346 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22072                      | Seq. ID | OJ990405_09.9819.C17 |
| Gene No. | 45922                      | Strand  | -                    |
| Start    | 35914                      | End     | 36358                |
| Name     | OJ990405_09.9819.C17.o5.ts | Method  | TBLASTX:Soybean      |
| Start    | 36053                      | End     | 36358                |
| GI       | none                       | Score   | 55                   |

Exons 36053..36109, 36158..36358

|             |                                  |         |                      |
|-------------|----------------------------------|---------|----------------------|
| Seq. No.    | 22073                            | Seq. ID | OJ990405_09.9819.C18 |
| Gene No.    | 45923                            | Strand  | +                    |
| Start       | 1                                | End     | 624                  |
| Name        | OJ990405_09.9819.C18.o1.np       | Method  | AAT/NAP              |
| Start       | 1                                | End     | 606                  |
| GI          | 5487873                          | Score   | 221                  |
| Exons       | 1..606                           |         |                      |
| GI Descrip. | (AF110333) PrMC3 [Pinus radiata] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22073                      | Seq. ID | OJ990405_09.9819.C18 |
| Gene No. | 45923                      | Strand  | +                    |
| Start    | 1                          | End     | 624                  |
| Name     | OJ990405_09.9819.C18.o1.gs | Method  | GENSCAN              |
| Start    | 105                        | End     | 624                  |
| GI       | none                       | Score   | .99                  |
| Exons    | 105..624                   |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22073   | Seq. ID | OJ990405_09.9819.C18 |
| Gene No. | 45924   | Strand  | +                    |
| Start    | 2485  | End     | 2954                 |
| Name     | OJ990405_09.9819.C18.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 1   | End     | 2922                 |
| GI       | none  | Score   | 58                   |
| Exons    | 1..48, 109..168, 190..276, 231..356, 289..366, 399..542, 400..600, 2764..2838, 2815..2922 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22073  | Seq. ID | OJ990405_09.9819.C18 |
| Gene No. | 45924  | Strand  | +                    |
| Start    | 2485   | End     | 2954                 |
| Name     | OJ990405_09.9819.C18.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 1  | End     | 2934                 |
| GI       | none   | Score   | 87                   |
| Exons    | 1..60, 6..278, 85..276, 2488..2619, 2520..2609, 2662..2712, 2763..2849, 2764..2850, 2815..2934, 2836..2898 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22073  | Seq. ID | OJ990405_09.9819.C18 |
| Gene No. | 45924  | Strand  | +                    |
| Start    | 2485   | End     | 2954                 |
| Name     | OJ990405_09.9819.C18.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 108  | End     | 597                  |
| GI       | none   | Score   | 61                   |
| Exons    | 108..155, 109..162, 202..276, 207..275, 289..366, 306..356, 397..597 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22073                        | Seq. ID | OJ990405_09.9819.C18 |
| Gene No. | 45924                        | Strand  | +                    |
| Start    | 2485                         | End     | 2954                 |
| Name     | OJ990405_09.9819.C18.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 336                          | End     | 600                  |
| GI       | none                         | Score   | 372                  |
| Exons    | 336..596, 337..600, 520..600 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22073 | Seq. ID | OJ990405_09.9819.C18 |
| Gene No. | 45924 | Strand  | +                    |
| Start    | 2485  | End     | 2954                 |

Name OJ990405\_09.9819.C18.o2.gs  
 Start 2485  
 GI none  
 Exons 2485..2945

Method GENSCAN  
 End 2945  
 Score .62

Seq. No. 22073  
 Gene No. 45924  
 Start 2485  
 Name OJ990405\_09.9819.C18.o1.tw  
 Start 2520  
 GI none  
 Exons 2520..2711, 2521..2616, 2662..2712, 2763..2849, 2764..2832

Seq. ID OJ990405\_09.9819.C18  
 Strand +  
 End 2954  
 Method TBLASTX:Wheat  
 End 2849  
 Score 104

Seq. No. 22073  
 Gene No. 45924  
 Start 2485  
 Name OJ990405\_09.9819.C18.o3.np  
 Start 2552  
 GI 2979555  
 Exons 2552..2954  
 GI Descrip. (AC003680) unknown protein [Arabidopsis thaliana]

Seq. ID OJ990405\_09.9819.C18  
 Strand +  
 End 2954  
 Method AAT/NAP  
 End 2954  
 Score 127

Seq. No. 22074  
 Gene No. 45925  
 Start 46  
 Name OJ990405\_09.9819.C19.o1.gs  
 Start 46  
 GI none  
 Exons 46..429

Seq. ID OJ990405\_09.9819.C19  
 Strand +  
 End 429  
 Method GENSCAN  
 End 429  
 Score 1

Seq. No. 22074  
 Gene No. 45926  
 Start 1862  
 Name OJ990405\_09.9819.C19.o2.gs  
 Start 1862  
 GI none  
 Exons 1862..2593, 2642..2929

Seq. ID OJ990405\_09.9819.C19  
 Strand +  
 End 2929  
 Method GENSCAN  
 End 2929  
 Score .83

Seq. No. 22074  
 Gene No. 45926  
 Start 1862  
 Name OJ990405\_09.9819.C19.o1.np  
 Start 2054  
 GI 5734715  
 Exons 2054..2917  
 GI Descrip. (AC008075) Similar to gb|AF110333 PrMC3 protein from Pinus radiata and is a member of PF|00135 Carboxylesterases family. EST gb|N37841 comes from this gene. [Arabidopsis thaliana]

Seq. ID OJ990405\_09.9819.C19  
 Strand +  
 End 2929  
 Method AAT/NAP  
 End 2917  
 Score 290

Seq. No. 22074  
 Gene No. 45927  
 Start 3625  
 Name OJ990405\_09.9819.C19.o2.tm  
 Start 120  
 GI none  
 Exons 120..152, 121..171, 169..342, 198..344, 2641..2910, 2642..2911

Seq. ID OJ990405\_09.9819.C19  
 Strand -  
 End 4714  
 Method TBLASTX:Maize  
 End 2911  
 Score 53



|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22074  | Seq. ID | OJ990405_09.9819.C19 |
| Gene No. | 45927  | Strand  | -                    |
| Start    | 3625   | End     | 4714                 |
| Name     | OJ990405_09.9819.C19.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1907   | End     | 2583                 |
| GI       | none   | Score   | 135                  |
| Exons    | 1907..2056, 1924..2055, 2026..2121, 2042..2119, 2177..2230, 2179..2214, 2279..2365, 2344..2583, 2402..2539 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22074  | Seq. ID | OJ990405_09.9819.C19 |
| Gene No. | 45927  | Strand  | -                    |
| Start    | 3625   | End     | 4714                 |
| Name     | OJ990405_09.9819.C19.o1.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 1907   | End     | 2238                 |
| GI       | none   | Score   | 292                  |
| Exons    | 1907..2119, 1910..2113, 1924..2127, 2177..2230, 2179..2238 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22074  | Seq. ID | OJ990405_09.9819.C19 |
| Gene No. | 45927  | Strand  | -                    |
| Start    | 3625   | End     | 4714                 |
| Name     | OJ990405_09.9819.C19.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1919   | End     | 2617                 |
| GI       | none   | Score   | 104                  |
| Exons    | 1919..2056, 2063..2119, 2177..2230, 2276..2353, 2402..2518, 2588..2617 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22074  | Seq. ID | OJ990405_09.9819.C19 |
| Gene No. | 45927  | Strand  | -                    |
| Start    | 3625   | End     | 4714                 |
| Name     | OJ990405_09.9819.C19.o3.gs                     | Method  | GENSCAN              |
| Start    | 3625   | End     | 4714                 |
| GI       | none   | Score   | .65                  |
| Exons    | 3625..3734, 4166..4261, 4433..4551, 4696..4714 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22075                      | Seq. ID | OJ990405_09.9819.C20 |
| Gene No. | 45928                      | Strand  | +                    |
| Start    | 2980                       | End     | 3538                 |
| Name     | OJ990405_09.9819.C20.o2.gs | Method  | GENSCAN              |
| Start    | 2980                       | End     | 3501                 |
| GI       | none                       | Score   | .65                  |
| Exons    | 2980..3240, 3389..3501     |         |                      |

|             |                                  |         |                      |
|-------------|----------------------------------|---------|----------------------|
| Seq. No.    | 22075                            | Seq. ID | OJ990405_09.9819.C20 |
| Gene No.    | 45928                            | Strand  | +                    |
| Start       | 2980                             | End     | 3538                 |
| Name        | OJ990405_09.9819.C20.o1.np       | Method  | AAT/NAP              |
| Start       | 3035                             | End     | 3538                 |
| GI          | 5487873                          | Score   | 238                  |
| Exons       | 3035..3538                       |         |                      |
| GI Descrip. | (AF110333) PrMC3 [Pinus radiata] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22075                      | Seq. ID | OJ990405_09.9819.C20 |
| Gene No. | 45928                      | Strand  | +                    |
| Start    | 2980                       | End     | 3538                 |
| Name     | OJ990405_09.9819.C20.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 3051                       | End     | 3358                 |
| GI       | none                       | Score   | 172                  |

Exons 3051..3221, 3052..3222, 3262..3357, 3263..3358

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22075  | Seq. ID | OJ990405_09.9819.C20 |
| Gene No. | 45928  | Strand  | +                    |
| Start    | 2980   | End     | 3538                 |
| Name     | OJ990405_09.9819.C20.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 3121   | End     | 3538                 |
| GI       | none   | Score   | 142                  |
| Exons    | 3121..3222, 3126..3221, 3263..3451, 3265..3399, 3476..3538, 3499..3537 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22075  | Seq. ID | OJ990405_09.9819.C20 |
| Gene No. | 45928  | Strand  | +                    |
| Start    | 2980   | End     | 3538                 |
| Name     | OJ990405_09.9819.C20.o1.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 3156   | End     | 3538                 |
| GI       | none   | Score   | 175                  |
| Exons    | 3156..3185, 3263..3448, 3265..3399, 3496..3537, 3497..3538 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22075  | Seq. ID | OJ990405_09.9819.C20 |
| Gene No. | 45928  | Strand  | +                    |
| Start    | 2980   | End     | 3538                 |
| Name     | OJ990405_09.9819.C20.o1.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 3157   | End     | 3532                 |
| GI       | none   | Score   | 72                   |
| Exons    | 3157..3222, 3263..3448, 3265..3399, 3452..3532 |         |                      |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22076                            | Seq. ID | OJ990405_09.9819.C21 |
| Gene No. | 45929                            | Strand  | -                    |
| Start    | 561                              | End     | 1685                 |
| Name     | OJ990405_09.9819.C21.o1.gs       | Method  | GENSCAN              |
| Start    | 561                              | End     | 1685                 |
| GI       | none                             | Score   | .57                  |
| Exons    | 561..664, 1087..1126, 1626..1685 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22077                      | Seq. ID | OJ990405_09.9819.C22 |
| Gene No. | 45930                      | Strand  | -                    |
| Start    | 28                         | End     | 370                  |
| Name     | OJ990405_09.9819.C22.o1.gs | Method  | GENSCAN              |
| Start    | 28                         | End     | 370                  |
| GI       | none                       | Score   | .99                  |
| Exons    | 28..370                    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22077                      | Seq. ID | OJ990405_09.9819.C22 |
| Gene No. | 45931                      | Strand  | -                    |
| Start    | 1002                       | End     | 1214                 |
| Name     | OJ990405_09.9819.C22.o2.gs | Method  | GENSCAN              |
| Start    | 1002                       | End     | 1214                 |
| GI       | none                       | Score   | .85                  |
| Exons    | 1002..1214                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22078                      | Seq. ID | OJ990405_09.9819.C23 |
| Gene No. | 45932                      | Strand  | +                    |
| Start    | 305                        | End     | 2543                 |
| Name     | OJ990405_09.9819.C23.o1.np | Method  | AAT/NAP              |
| Start    | 305                        | End     | 2378                 |
| GI       | 6967707                    | Score   | 293                  |

Exons 305..434, 1270..1395, 1642..1793, 2259..2378  
 GI Descrip. (AL139074) putative acetyltransferase [Campylobacter jejuni]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22078  | Seq. ID | OJ990405_09.9819.C23 |
| Gene No. | 45932  | Strand  | +                    |
| Start    | 305  | End     | 2543                 |
| Name     | OJ990405_09.9819.C23.o1.gs                   | Method  | GENSCAN              |
| Start    | 311  | End     | 2543                 |
| GI       | none   | Score   | .85                  |
| Exons    | 311..434, 1270..1395, 1642..1793, 2259..2543 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22078  | Seq. ID | OJ990405_09.9819.C23 |
| Gene No. | 45933  | Strand  | -                    |
| Start    | 3769   | End     | 3988                 |
| Name     | OJ990405_09.9819.C23.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 248  | End     | 2555                 |
| GI       | none   | Score   | 250                  |
| Exons    | 248..436, 274..435, 294..437, 296..442, 1268..1399, 1269..1397, 1640..1795, 1641..1796, 1642..1812, 2251..2367, 2253..2555, 2259..2552, 2431..2553 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22078  | Seq. ID | OJ990405_09.9819.C23 |
| Gene No. | 45933  | Strand  | -                    |
| Start    | 3769   | End     | 3988                 |
| Name     | OJ990405_09.9819.C23.o2.tw                                     | Method  | TBLASTX:Wheat        |
| Start    | 248  | End     | 1309                 |
| GI       | none   | Score   | 231                  |
| Exons    | 248..436, 274..435, 288..443, 290..442, 1267..1308, 1268..1309 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22078  | Seq. ID | OJ990405_09.9819.C23 |
| Gene No. | 45933  | Strand  | -                    |
| Start    | 3769   | End     | 3988                 |
| Name     | OJ990405_09.9819.C23.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 268  | End     | 2513                 |
| GI       | none   | Score   | 206                  |
| Exons    | 268..435, 269..436, 1256..1399, 1269..1397, 1272..1415, 1639..1794, 1640..1795, 1641..1796, 2258..2353, 2259..2513, 2412..2513 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22078  | Seq. ID | OJ990405_09.9819.C23 |
| Gene No. | 45933  | Strand  | -                    |
| Start    | 3769   | End     | 3988                 |
| Name     | OJ990405_09.9819.C23.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 295  | End     | 2534                 |
| GI       | none   | Score   | 194                  |
| Exons    | 295..435, 296..436, 296..448, 1268..1396, 1269..1397, 1640..1795, 1641..1796, 2258..2467, 2259..2534, 2409..2531 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22078  | Seq. ID | OJ990405_09.9819.C23 |
| Gene No. | 45933  | Strand  | -                    |
| Start    | 3769   | End     | 3988                 |
| Name     | OJ990405_09.9819.C23.o1.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 1638   | End     | 2489                 |
| GI       | none   | Score   | 228                  |
| Exons    | 1638..1793, 1640..1804, 1641..1796, 2264..2353, 2265..2489 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22078 | Seq. ID | OJ990405_09.9819.C23 |
|----------|-------|---------|----------------------|

|          |                            |        |         |
|----------|----------------------------|--------|---------|
| Gene No. | 45933                      | Strand | -       |
| Start    | 3769                       | End    | 3988    |
| Name     | OJ990405_09.9819.C23.o2.gs | Method | GENSCAN |
| Start    | 3769                       | End    | 3988    |
| GI       | none                       | Score  | .49     |
| Exons    | 3769..3988                 |        |         |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22079  | Seq. ID | OJ990405_09.9819.C24 |
| Gene No.    | 45934  | Strand  | -                    |
| Start       | 1  | End     | 5584                 |
| Name        | OJ990405_09.9819.C24.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 3746                 |
| GI          | 2760844  | Score   | 756                  |
| Exons       | 1..79, 215..349, 641..699, 773..889, 980..1160, 1654..1737, 1855..1923, 2223..2363, 2888..2980, 3197..3325, 3459..3746 |         |                      |
| GI Descrip. | (AC003105) hypothetical protein [Arabidopsis thaliana]   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22079  | Seq. ID | OJ990405_09.9819.C24 |
| Gene No. | 45934  | Strand  | -                    |
| Start    | 1  | End     | 5584                 |
| Name     | OJ990405_09.9819.C24.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 212  | End     | 3665                 |
| GI       | none   | Score   | 94                   |
| Exons    | 212..355, 213..350, 632..700, 633..701, 774..890, 775..891, 963..1064, 967..1026, 1651..1734, 1852..1923, 2173..2376, 2223..2375, 2891..2980, 3186..3323, 3194..3337, 3459..3665 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22079   | Seq. ID | OJ990405_09.9819.C24 |
| Gene No. | 45934   | Strand  | -                    |
| Start    | 1   | End     | 5584                 |
| Name     | OJ990405_09.9819.C24.o1.gs  | Method  | GENSCAN              |
| Start    | 215   | End     | 5584                 |
| GI       | none  | Score   | .54                  |
| Exons    | 215..349, 773..1160, 1654..1737, 1855..1923, 2223..2363, 2888..2980, 3197..3325, 3459..3635, 4966..5088, 5255..5584 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22079  | Seq. ID | OJ990405_09.9819.C24 |
| Gene No. | 45934  | Strand  | -                    |
| Start    | 1  | End     | 5584                 |
| Name     | OJ990405_09.9819.C24.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 771  | End     | 2971                 |
| GI       | none   | Score   | 122                  |
| Exons    | 771..881, 772..885, 980..1183, 983..1162, 984..1163, 988..1170, 1645..1737, 1650..1739, 1655..1732, 1839..1916, 1844..1915, 1855..1923, 2221..2370, 2226..2363, 2875..2952, 2888..2971 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22079  | Seq. ID | OJ990405_09.9819.C24 |
| Gene No. | 45934  | Strand  | -                    |
| Start    | 1  | End     | 5584                 |
| Name     | OJ990405_09.9819.C24.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 3187   | End     | 3736                 |
| GI       | none   | Score   | 142                  |
| Exons    | 3187..3330, 3194..3340, 3195..3326, 3196..3336, 3456..3722, 3457..3720, 3459..3731, 3530..3736 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22080 | Seq. ID | OJ990405_09.9819.C25 |
| Gene No. | 45935 | Strand  | -                    |

|       |                            |        |         |
|-------|----------------------------|--------|---------|
| Start | 372                        | End    | 472     |
| Name  | OJ990405_09.9819.C25.o1.gs | Method | GENSCAN |
| Start | 372                        | End    | 472     |
| GI    | none                       | Score  | .62     |
| Exons | 372..472                   |        |         |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22081  | Seq. ID | OJ990405_09.9819.C26 |
| Gene No.    | 45936  | Strand  | -                    |
| Start       | 1  | End     | 1163                 |
| Name        | OJ990405_09.9819.C26.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 548                  |
| GI          | 6006359  | Score   | 50                   |
| Exons       | 1..36, 451..548                                |         |                      |
| GI Descrip. | (AP000559) hypothetical protein [Oryza sativa] |         |                      |

|          |                                 |         |                      |
|----------|---------------------------------|---------|----------------------|
| Seq. No. | 22081                           | Seq. ID | OJ990405_09.9819.C26 |
| Gene No. | 45936                           | Strand  | -                    |
| Start    | 1                               | End     | 1163                 |
| Name     | OJ990405_09.9819.C26.o1.gs      | Method  | GENSCAN              |
| Start    | 447                             | End     | 1163                 |
| GI       | none                            | Score   | .56                  |
| Exons    | 447..548, 879..1007, 1089..1163 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22082                      | Seq. ID | OJ990405_09.9819.C27 |
| Gene No. | 45937                      | Strand  | +                    |
| Start    | 126                        | End     | 2015                 |
| Name     | OJ990405_09.9819.C27.o1.gs | Method  | GENSCAN              |
| Start    | 126                        | End     | 2015                 |
| GI       | none                       | Score   | .78                  |
| Exons    | 126..301, 1938..2015       |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22082  | Seq. ID | OJ990405_09.9819.C27 |
| Gene No.    | 45938  | Strand  | +                    |
| Start       | 2028   | End     | 2279                 |
| Name        | OJ990405_09.9819.C27.o1.gp   | Method  | AAT/GAP              |
| Start       | 2028   | End     | 2279                 |
| GI          | 4107143  | Score   | 316                  |
| Exons       | 2028..2279   |         |                      |
| GI Descrip. | 5803242/dbj AP000399.1 AP000399 7.0e-30 Oryza sativa genomic DNA, chromosome 6, clone:P0535G04 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22082  | Seq. ID | OJ990405_09.9819.C27 |
| Gene No. | 45939  | Strand  | -                    |
| Start    | 2350   | End     | 5098                 |
| Name     | OJ990405_09.9819.C27.o2.gs                                 | Method  | GENSCAN              |
| Start    | 2350   | End     | 5098                 |
| GI       | none   | Score   | .7                   |
| Exons    | 2350..2469, 2962..3060, 3156..3255, 4475..4526, 5006..5098 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22083                      | Seq. ID | OJ990405_09.9819.C28 |
| Gene No. | 45940                      | Strand  | +                    |
| Start    | 382                        | End     | 509                  |
| Name     | OJ990405_09.9819.C28.o1.gs | Method  | GENSCAN              |
| Start    | 382                        | End     | 509                  |
| GI       | none                       | Score   | .42                  |
| Exons    | 382..509                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22084                                      | Seq. ID | OJ990405_09.9819.C30 |
| Gene No. | 45941                                      | Strand  | +                    |
| Start    | 72   | End     | 2245                 |
| Name     | OJ990405_09.9819.C30.o1.gs                 | Method  | GENSCAN              |
| Start    | 72   | End     | 2245                 |
| GI       | none                                       | Score   | .8                   |
| Exons    | 72..557, 938..1088, 1725..1897, 2138..2245 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22084   | Seq. ID | OJ990405_09.9819.C30 |
| Gene No. | 45941   | Strand  | +                    |
| Start    | 72  | End     | 2245                 |
| Name     | OJ990405_09.9819.C30.o1.tm                          | Method  | TBLASTX:Maize        |
| Start    | 467   | End     | 1093                 |
| GI       | none  | Score   | 131                  |
| Exons    | 467..562, 468..563, 935..1093, 936..1085, 941..1087 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22085                      | Seq. ID | OJ990405_09.9819.C31 |
| Gene No. | 45942                      | Strand  | +                    |
| Start    | 491                        | End     | 928                  |
| Name     | OJ990405_09.9819.C31.o1.gs | Method  | GENSCAN              |
| Start    | 491                        | End     | 928                  |
| GI       | none                       | Score   | .72                  |
| Exons    | 491..559, 783..928         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22086                      | Seq. ID | OJ990405_09.9819.C32 |
| Gene No. | 45943                      | Strand  | +                    |
| Start    | 284                        | End     | 735                  |
| Name     | OJ990405_09.9819.C32.o1.gs | Method  | GENSCAN              |
| Start    | 284                        | End     | 735                  |
| GI       | none                       | Score   | .76                  |
| Exons    | 284..487, 517..735         |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22086   | Seq. ID | OJ990405_09.9819.C32 |
| Gene No.    | 45944   | Strand  | +                    |
| Start       | 1282  | End     | 1705                 |
| Name        | OJ990405_09.9819.C32.o1.gp  | Method  | AAT/GAP              |
| Start       | 1282  | End     | 1705                 |
| GI          | 56595_1.R1084   | Score   | 828                  |
| Exons       | 1282..1705  |         |                      |
| GI Descrip. | '4314378/gb AAD15588  2.0e-21 (AC006232) putative lipase [Arabidopsis thaliana] >gi_5306262_gb_AAD41994.1 AC006233_5 (AC006233) putative lipase [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22086  | Seq. ID | OJ990405_09.9819.C32 |
| Gene No. | 45945  | Strand  | +                    |
| Start    | 4489   | End     | 5036                 |
| Name     | OJ990405_09.9819.C32.o3.gs                     | Method  | GENSCAN              |
| Start    | 4489   | End     | 5036                 |
| GI       | none   | Score   | .63                  |
| Exons    | 4489..4585, 4618..4640, 4661..4843, 4939..5036 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22086                      | Seq. ID | OJ990405_09.9819.C32 |
| Gene No. | 45945                      | Strand  | +                    |
| Start    | 4489                       | End     | 5036                 |
| Name     | OJ990405_09.9819.C32.o3.gp | Method  | AAT/GAP              |
| Start    | 4662                       | End     | 5036                 |
| GI       | 11881_1.R1084              | Score   | 447                  |

Exons 4662..4843, 4939..5036  
 GI Descrip. '2791806 2.0e-51 (AF041433) bet3 [Mus musculus]'

Seq. No. 22086 Seq. ID OJ990405\_09.9819.C32  
 Gene No. 45946 Strand -  
 Start 1 End 3608  
 Name OJ990405\_09.9819.C32.o1.np Method AAT/NAP  
 Start 1 End 3541  
 GI 6691210 Score 568  
 Exons 1..54, 809..918, 1363..2008, 2969..3189, 3292..3541  
 GI Descrip. (AC007508) FlK23.15 [Arabidopsis thaliana]

Seq. No. 22086 Seq. ID OJ990405\_09.9819.C32  
 Gene No. 45946 Strand -  
 Start 1 End 3608  
 Name OJ990405\_09.9819.C32.o1.tw Method TBLASTX:Wheat  
 Start 1291 End 1654  
 GI none Score 128  
 Exons 1291..1410, 1362..1550, 1373..1549, 1544..1654

Seq. No. 22086 Seq. ID OJ990405\_09.9819.C32  
 Gene No. 45946 Strand -  
 Start 1 End 3608  
 Name OJ990405\_09.9819.C32.o2.gs Method GENSCAN  
 Start 1352 End 3589  
 GI none Score .53  
 Exons 1352..2008, 3017..3189, 3292..3589

Seq. No. 22086 Seq. ID OJ990405\_09.9819.C32  
 Gene No. 45946 Strand -  
 Start 1 End 3608  
 Name OJ990405\_09.9819.C32.o1.tc Method TBLASTX:Cress  
 Start 1358 End 3454  
 GI none Score 80  
 Exons 1358..1564, 1538..1654, 1715..1984, 3140..3187, 3293..3364, 3294..3374, 3392..3454, 3393..3440

Seq. No. 22086 Seq. ID OJ990405\_09.9819.C32  
 Gene No. 45946 Strand -  
 Start 1 End 3608  
 Name OJ990405\_09.9819.C32.o1.ts Method TBLASTX:Soybean  
 Start 1364 End 1654  
 GI none Score 84  
 Exons 1364..1570, 1383..1565, 1538..1654

Seq. No. 22086 Seq. ID OJ990405\_09.9819.C32  
 Gene No. 45946 Strand -  
 Start 1 End 3608  
 Name OJ990405\_09.9819.C32.o1.tm Method TBLASTX:Maize  
 Start 1368 End 3470  
 GI none Score 137  
 Exons 1368..1652, 1370..1654, 1715..1987, 3062..3187, 3078..3188, 3090..3188, 3287..3469, 3294..3374, 3408..3470

Seq. No. 22086 Seq. ID OJ990405\_09.9819.C32  
 Gene No. 45946 Strand -  
 Start 1 End 3608

|       |  |        |                 |
|-------|--|--------|-----------------|
| Name  | OJ990405_09.9819.C32.o2.ts   | Method | TBLASTX:Soybean |
| Start | 2975   | End    | 3457            |
| GI    | none   | Score  | 46              |
| Exons | 2975..3139, 3003..3122, 3140..3187, 3153..3179, 3284..3364, 3297..3365, 3363..3440, 3377..3457 |        |                 |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22086   | Seq. ID | OJ990405_09.9819.C32 |
| Gene No.    | 45946   | Strand  | -                    |
| Start       | 1   | End     | 3608                 |
| Name        | OJ990405_09.9819.C32.o2.gp  | Method  | AAT/GAP              |
| Start       | 3015  | End     | 3608                 |
| GI          | 53758_1.R1084   | Score   | 860                  |
| Exons       | 3015..3189, 3292..3608  |         |                      |
| GI Descrip. | '4314378/gb AAD15588  9.0e-13 (AC006232) putative lipase [Arabidopsis thaliana] >gi_5306262_gb_AAD41994.1 AC006233_5 (AC006233) putative lipase [Arabidopsis thaliana]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22087                      | Seq. ID | OJ990405_09.9819.C33 |
| Gene No. | 45947                      | Strand  | +                    |
| Start    | 361                        | End     | 878                  |
| Name     | OJ990405_09.9819.C33.o1.gs | Method  | GENSCAN              |
| Start    | 361                        | End     | 553                  |
| GI       | none                       | Score   | .81                  |
| Exons    | 361..553                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22087  | Seq. ID | OJ990405_09.9819.C33 |
| Gene No. | 45947  | Strand  | +                    |
| Start    | 361  | End     | 878                  |
| Name     | OJ990405_09.9819.C33.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 371  | End     | 563                  |
| GI       | none   | Score   | 34                   |
| Exons    | 371..397, 408..485, 428..523, 428..544, 430..546, 445..552, 465..563 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22087                                  | Seq. ID | OJ990405_09.9819.C33 |
| Gene No. | 45947                                  | Strand  | +                    |
| Start    | 361                                    | End     | 878                  |
| Name     | OJ990405_09.9819.C33.o1.tw             | Method  | TBLASTX:Wheat        |
| Start    | 434                                    | End     | 563                  |
| GI       | none                                   | Score   | 65                   |
| Exons    | 434..538, 435..485, 445..552, 459..563 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22087  | Seq. ID | OJ990405_09.9819.C33 |
| Gene No.    | 45947  | Strand  | +                    |
| Start       | 361  | End     | 878                  |
| Name        | OJ990405_09.9819.C33.o1.np   | Method  | AAT/NAP              |
| Start       | 439  | End     | 878                  |
| GI          | 5668814  | Score   | 74                   |
| Exons       | 439..563, 842..878   |         |                      |
| GI Descrip. | (AC007519) ESTs gb H36253 and gb AA04251 come from this gene. [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22088                      | Seq. ID | OJ990405_09.9819.C34 |
| Gene No. | 45948                      | Strand  | +                    |
| Start    | 95                         | End     | 2149                 |
| Name     | OJ990405_09.9819.C34.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 92                         | End     | 1909                 |



|       |   |       |     |
|-------|---|-------|-----|
| GI    | none  | Score | 115 |
| Exons | 92..247, 150..248, 1002..1109, 1005..1109, 1007..1144, 1009..1110, 1271..1489, 1279..1464, 1786..1896, 1792..1908, 1811..1909 |       |     |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22088                                       | Seq. ID | OJ990405_09.9819.C34 |
| Gene No. | 45948                                       | Strand  | +                    |
| Start    | 95  | End     | 2149                 |
| Name     | OJ990405_09.9819.C34.o1.gs                  | Method  | GENSCAN              |
| Start    | 95  | End     | 1908                 |
| GI       | none  | Score   | .98                  |
| Exons    | 95..185, 1008..1107, 1280..1462, 1786..1908 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22088  | Seq. ID | OJ990405_09.9819.C34 |
| Gene No.    | 45948  | Strand  | +                    |
| Start       | 95   | End     | 2149                 |
| Name        | OJ990405_09.9819.C34.o1.np                   | Method  | AAT/NAP              |
| Start       | 100  | End     | 1902                 |
| GI          | 2791806                                      | Score   | 372                  |
| Exons       | 100..247, 1008..1107, 1280..1462, 1786..1902 |         |                      |
| GI Descrip. | (AF041433) bet3 [Mus musculus]               |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22088  | Seq. ID | OJ990405_09.9819.C34 |
| Gene No. | 45948  | Strand  | +                    |
| Start    | 95   | End     | 2149                 |
| Name     | OJ990405_09.9819.C34.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 125  | End     | 1914                 |
| GI       | none   | Score   | 121                  |
| Exons    | 125..247, 150..293, 1005..1109, 1009..1110, 1271..1489, 1279..1464, 1784..1912, 1786..1896, 1786..1914, 1790..1906 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22088  | Seq. ID | OJ990405_09.9819.C34 |
| Gene No.    | 45948  | Strand  | +                    |
| Start       | 95   | End     | 2149                 |
| Name        | OJ990405_09.9819.C34.o1.gp                       | Method  | AAT/GAP              |
| Start       | 1008   | End     | 1464                 |
| GI          | 11881_1.R1084                                    | Score   | 507                  |
| Exons       | 1008..1107, 1280..1464                           |         |                      |
| GI Descrip. | '2791806 2.0e-51 (AF041433) bet3 [Mus musculus]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22088                      | Seq. ID | OJ990405_09.9819.C34 |
| Gene No. | 45948                      | Strand  | +                    |
| Start    | 95                         | End     | 2149                 |
| Name     | OJ990405_09.9819.C34.o2.gp | Method  | AAT/GAP              |
| Start    | 1414                       | End     | 2149                 |
| GI       | 3760040                    | Score   | 754                  |
| Exons    | 1414..1462, 1786..2149     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22089  | Seq. ID | OJ990405_09.9819.C35 |
| Gene No.    | 45949  | Strand  | +                    |
| Start       | 1  | End     | 3256                 |
| Name        | OJ990405_09.9819.C35.o1.np                   | Method  | AAT/NAP              |
| Start       | 1  | End     | 3250                 |
| GI          | 1655930                                      | Score   | 976                  |
| Exons       | 1..86, 471..1003, 1184..1496, 2451..3250     |         |                      |
| GI Descrip. | (U66564) RUSH-lalpha [Oryctolagus cuniculus] |         |                      |

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 22089                             | Seq. ID | OJ990405_09.9819.C35 |
| Gene No. | 45949                             | Strand  | +                    |
| Start    | 1                                 | End     | 3256                 |
| Name     | OJ990405_09.9819.C35.o1.gs        | Method  | GENSCAN              |
| Start    | 146                               | End     | 3256                 |
| GI       | none                              | Score   | .82                  |
| Exons    | 146..1003, 1184..1496, 2445..3256 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22089  | Seq. ID | OJ990405_09.9819.C35 |
| Gene No. | 45950  | Strand  | -                    |
| Start    | 4142   | End     | 4363                 |
| Name     | OJ990405_09.9819.C35.o1.ts                             | Method  | TBLASTX:Soybean      |
| Start    | 389  | End     | 3166                 |
| GI       | none   | Score   | 67                   |
| Exons    | 389..445, 728..958, 2780..2959, 2945..3166, 2965..3075 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22089                                  | Seq. ID | OJ990405_09.9819.C35 |
| Gene No. | 45950                                  | Strand  | -                    |
| Start    | 4142                                   | End     | 4363                 |
| Name     | OJ990405_09.9819.C35.o1.tc             | Method  | TBLASTX:Cress        |
| Start    | 533                                    | End     | 862                  |
| GI       | none                                   | Score   | 154                  |
| Exons    | 533..637, 535..672, 634..861, 635..862 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22089                      | Seq. ID | OJ990405_09.9819.C35 |
| Gene No. | 45950                      | Strand  | -                    |
| Start    | 4142                       | End     | 4363                 |
| Name     | OJ990405_09.9819.C35.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 629                        | End     | 967                  |
| GI       | none                       | Score   | 54                   |
| Exons    | 629..703, 743..967         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22089  | Seq. ID | OJ990405_09.9819.C35 |
| Gene No. | 45950  | Strand  | -                    |
| Start    | 4142   | End     | 4363                 |
| Name     | OJ990405_09.9819.C35.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 1235   | End     | 2595                 |
| GI       | none   | Score   | 353                  |
| Exons    | 1235..1480, 1254..1475, 1333..1500, 2435..2593, 2440..2595, 2444..2593 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22089  | Seq. ID | OJ990405_09.9819.C35 |
| Gene No. | 45950  | Strand  | -                    |
| Start    | 4142   | End     | 4363                 |
| Name     | OJ990405_09.9819.C35.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 2595   | End     | 2865                 |
| GI       | none   | Score   | 71                   |
| Exons    | 2595..2699, 2596..2670, 2596..2709, 2597..2710, 2598..2708, 2645..2710, 2684..2863, 2702..2857, 2707..2865 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22089  | Seq. ID | OJ990405_09.9819.C35 |
| Gene No. | 45950  | Strand  | -                    |
| Start    | 4142   | End     | 4363                 |
| Name     | OJ990405_09.9819.C35.o1.tm                     | Method  | TBLASTX:Maize        |
| Start    | 2932   | End     | 3250                 |
| GI       | none   | Score   | 409                  |
| Exons    | 2932..3078, 2933..3205, 3149..3250, 3185..3247 |         |                      |

Seq. No. 22089  
 Gene No. 45950  
 Start 4142  
 Name OJ990405\_09.9819.C35.o2.tc  
 Start 2945  
 GI none  
 Exons 2945..3241, 2959..3081

Seq. ID OJ990405\_09.9819.C35  
 Strand -  
 End 4363  
 Method TBLASTX:Cress  
 End 3241  
 Score 259

Seq. No. 22089  
 Gene No. 45950  
 Start 4142  
 Name OJ990405\_09.9819.C35.o2.gs  
 Start 4142  
 GI none  
 Exons 4142..4363

Seq. ID OJ990405\_09.9819.C35  
 Strand -  
 End 4363  
 Method GENSCAN  
 End 4363  
 Score .49

Seq. No. 22090  
 Gene No. 45951  
 Start 152  
 Name OJ990415\_09.9819.C1.o1.gp  
 Start 152  
 GI 3760424  
 Exons 152..568

Seq. ID OJ990415\_09.9819.C1  
 Strand +  
 End 580  
 Method AAT/GAP  
 End 568  
 Score 795

Seq. No. 22090  
 Gene No. 45951  
 Start 152  
 Name OJ990415\_09.9819.C1.o1.gs  
 Start 424  
 GI none  
 Exons 424..580

Seq. ID OJ990415\_09.9819.C1  
 Strand +  
 End 580  
 Method GENSCAN  
 End 580  
 Score .97

Seq. No. 22091  
 Gene No. 45952  
 Start 84  
 Name OJ990415\_09.9819.C4.o1.gp  
 Start 84  
 GI 3760424  
 Exons 84..410

Seq. ID OJ990415\_09.9819.C4  
 Strand +  
 End 410  
 Method AAT/GAP  
 End 410  
 Score 603

Seq. No. 22091  
 Gene No. 45953  
 Start 113  
 Name OJ990415\_09.9819.C4.o1.gs  
 Start 113  
 GI none  
 Exons 113..247, 620..709

Seq. ID OJ990415\_09.9819.C4  
 Strand -  
 End 709  
 Method GENSCAN  
 End 709  
 Score .83

Seq. No. 22092  
 Gene No. 45954  
 Start 2172  
 Name OJ990415\_09.9819.C6.o1.gs  
 Start 2172  
 GI none  
 Exons 2172..2396

Seq. ID OJ990415\_09.9819.C6  
 Strand -  
 End 2396  
 Method GENSCAN  
 End 2396  
 Score .7

|          |                                |         |                     |
|----------|--------------------------------|---------|---------------------|
| Seq. No. | 22093                          | Seq. ID | OJ990415_09.9819.C7 |
| Gene No. | 45955                          | Strand  | +                   |
| Start    | 409                            | End     | 2049                |
| Name     | OJ990415_09.9819.C7.o1.gs      | Method  | GENSCAN             |
| Start    | 409                            | End     | 2049                |
| GI       | none                           | Score   | .44                 |
| Exons    | 409..570, 759..915, 1864..2049 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22094  | Seq. ID | OJ990415_09.9819.C8 |
| Gene No.    | 45956  | Strand  | +                   |
| Start       | 963  | End     | 1481                |
| Name        | OJ990415_09.9819.C8.o1.np                      | Method  | AAT/NAP             |
| Start       | 963  | End     | 1481                |
| GI          | 6907088  | Score   | 487                 |
| Exons       | 963..1100, 1277..1481                          |         |                     |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22094                     | Seq. ID | OJ990415_09.9819.C8 |
| Gene No. | 45957                     | Strand  | -                   |
| Start    | 408                       | End     | 1007                |
| Name     | OJ990415_09.9819.C8.o1.gs | Method  | GENSCAN             |
| Start    | 408                       | End     | 1007                |
| GI       | none                      | Score   | .89                 |
| Exons    | 408..481, 977..1007       |         |                     |

|          |                                   |         |                     |
|----------|-----------------------------------|---------|---------------------|
| Seq. No. | 22095                             | Seq. ID | OJ990415_09.9819.C9 |
| Gene No. | 45958                             | Strand  | +                   |
| Start    | 229                               | End     | 2082                |
| Name     | OJ990415_09.9819.C9.o1.gs         | Method  | GENSCAN             |
| Start    | 229                               | End     | 2082                |
| GI       | none                              | Score   | .79                 |
| Exons    | 229..1179, 1548..1673, 1765..2082 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22095                     | Seq. ID | OJ990415_09.9819.C9 |
| Gene No. | 45959                     | Strand  | -                   |
| Start    | 4953                      | End     | 5402                |
| Name     | OJ990415_09.9819.C9.o2.gs | Method  | GENSCAN             |
| Start    | 4953                      | End     | 5402                |
| GI       | none                      | Score   | .99                 |
| Exons    | 4953..5402                |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22095                     | Seq. ID | OJ990415_09.9819.C9 |
| Gene No. | 45960                     | Strand  | -                   |
| Start    | 6037                      | End     | 6398                |
| Name     | OJ990415_09.9819.C9.o3.gs | Method  | GENSCAN             |
| Start    | 6037                      | End     | 6398                |
| GI       | none                      | Score   | .84                 |
| Exons    | 6037..6230, 6269..6398    |         |                     |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22096                            | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45961                            | Strand  | +                    |
| Start    | 568                              | End     | 2505                 |
| Name     | OJ990415_09.9819.C13.o1.gs       | Method  | GENSCAN              |
| Start    | 568                              | End     | 2505                 |
| GI       | none                             | Score   | .68                  |
| Exons    | 568..694, 2273..2401, 2471..2505 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45962  | Strand  | +                    |
| Start    | 3784   | End     | 18311                |
| Name     | OJ990415_09.9819.C13.o2.gs   | Method  | GENSCAN              |
| Start    | 3784   | End     | 11161                |
| GI       | none   | Score   | .47                  |
| Exons    | 3784..3860, 4324..4514, 6015..6267, 6712..6791, 6848..6911, 9678..9705, 10424..10582, 10694..10845, 10954..11161 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No.    | 45962  | Strand  | +                    |
| Start       | 3784   | End     | 18311                |
| Name        | OJ990415_09.9819.C13.o1.np   | Method  | AAT/NAP              |
| Start       | 6083   | End     | 18311                |
| GI          | 6552743  | Score   | 348                  |
| Exons       | 6083..6267, 9492..9557, 9678..9817, 10066..10292, 10424..10582, 10694..10845, 10954..11126, 18259..18311 |         |                      |
| GI Descrip. | (AC013482) T26F17.11 [Arabidopsis thaliana]  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45963  | Strand  | +                    |
| Start    | 21684  | End     | 23046                |
| Name     | OJ990415_09.9819.C13.o4.gs   | Method  | GENSCAN              |
| Start    | 21684  | End     | 23046                |
| GI       | none   | Score   | .69                  |
| Exons    | 21684..21760, 21977..22109, 22243..22481, 22603..22774, 22852..23046 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45964  | Strand  | +                    |
| Start    | 23608  | End     | 25966                |
| Name     | OJ990415_09.9819.C13.o5.gs   | Method  | GENSCAN              |
| Start    | 23608  | End     | 25725                |
| GI       | none   | Score   | .78                  |
| Exons    | 23608..23937, 24033..24618, 24755..24870, 24943..25110, 25203..25330, 25413..25512, 25621..25725 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No.    | 45964  | Strand  | +                    |
| Start       | 23608  | End     | 25966                |
| Name        | OJ990415_09.9819.C13.o2.np   | Method  | AAT/NAP              |
| Start       | 23834  | End     | 25722                |
| GI          | 639722   | Score   | 1973                 |
| Exons       | 23834..24618, 24755..24870, 24943..25110, 25203..25330, 25413..25512, 25621..25722 |         |                      |
| GI Descrip. | (L27484) calcium-dependent protein kinase [Zea mays]                               |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22096   | Seq. ID | OJ990415_09.9819.C13 |
| Gene No.    | 45964   | Strand  | +                    |
| Start       | 23608   | End     | 25966                |
| Name        | OJ990415_09.9819.C13.o1.gp  | Method  | AAT/GAP              |
| Start       | 24956   | End     | 25966                |
| GI          | 31161_1.R1084   | Score   | 1362                 |
| Exons       | 24956..25110, 25203..25330, 25413..25512, 25621..25966                |         |                      |
| GI Descrip. | '639722 8.0e-68 (L27484) calcium-dependent protein kinase [Zea mays]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45965  | Strand  | -                    |
| Start    | 13286  | End     | 21167                |
| Name     | OJ990415_09.9819.C13.o3.gs   | Method  | GENSCAN              |
| Start    | 13286  | End     | 21167                |
| GI       | none   | Score   | .54                  |
| Exons    | 13286..13315, 14763..14792, 14908..15015, 15099..15184,<br>15591..15686, 15899..15986, 17213..17413, 17899..17961,<br>18041..18117, 18612..18672, 20286..20415, 21004..21167 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22096                      | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45966                      | Strand  | -                    |
| Start    | 27428                      | End     | 27963                |
| Name     | OJ990415_09.9819.C13.o6.gs | Method  | GENSCAN              |
| Start    | 27428                      | End     | 27963                |
| GI       | none                       | Score   | .56                  |
| Exons    | 27428..27841, 27898..27963 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22096                      | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45966                      | Strand  | -                    |
| Start    | 27428                      | End     | 27963                |
| Name     | OJ990415_09.9819.C13.o2.gp | Method  | AAT/GAP              |
| Start    | 27544                      | End     | 27800                |
| GI       | 2275895                    | Score   | .473                 |
| Exons    | 27544..27800               |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22096   | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967   | Strand  | -                    |
| Start    | 28135   | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o3.ts  | Method  | TBLASTX:Soybean      |
| Start    | 10101   | End     | 10735                |
| GI       | none  | Score   | 55                   |
| Exons    | 10101..10172, 10221..10292, 10412..10579, 10435..10587,<br>10693..10734, 10694..10735 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967  | Strand  | -                    |
| Start    | 28135  | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 10424  | End     | 10845                |
| GI       | none   | Score   | 83                   |
| Exons    | 10424..10486, 10426..10494, 10432..10488, 10494..10571,<br>10495..10575, 10496..10525, 10502..10573, 10518..10574,<br>10661..10765, 10685..10843, 10693..10845, 10693..10845 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22096   | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967   | Strand  | -                    |
| Start    | 28135   | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o6.tm  | Method  | TBLASTX:Maize        |
| Start    | 12920   | End     | 18630                |
| GI       | none  | Score   | 67                   |
| Exons    | 12920..12994, 14002..14142, 14902..15015, 15090..15185,<br>15897..15983, 15898..15987, 17213..17290, 17214..17381,<br>17396..17437, 18183..18281, 18184..18288, 18224..18283,<br>18392..18496, 18411..18494, 18595..18630 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22096 | Seq. ID | OJ990415_09.9819.C13 |
|----------|-------|---------|----------------------|

|          |  |        |                 |
|----------|--|--------|-----------------|
| Gene No. | 45967  | Strand | -               |
| Start    | 28135  | End    | 28343           |
| Name     | OJ990415_09.9819.C13.o2.ts   | Method | TBLASTX:Soybean |
| Start    | 14902  | End    | 21116           |
| GI       | none   | Score  | 62              |
| Exons    | 14902..15033, 15051..15191, 15882..15986, 15898..15981,<br>17210..17302, 17213..17281, 17604..17681, 17755..17820,<br>17899..17961, 17899..17961, 18039..18095, 18183..18281,<br>18190..18276, 18392..18496, 18399..18494, 18610..18672,<br>19093..19140, 21015..21059, 21057..21116 |        |                 |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22096   | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967   | Strand  | -                    |
| Start    | 28135   | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o5.tm  | Method  | TBLASTX:Maize        |
| Start    | 17598   | End     | 17964                |
| GI       | none  | Score   | 75                   |
| Exons    | 17598..17687, 17599..17682, 17755..17820, 17759..17815,<br>17899..17964, 17900..17962 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22096   | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967   | Strand  | -                    |
| Start    | 28135   | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o4.tm  | Method  | TBLASTX:Maize        |
| Start    | 22235   | End     | 22452                |
| GI       | none  | Score   | 126                  |
| Exons    | 22235..22450, 22236..22445, 22242..22451, 22243..22452,<br>22243..22452 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096                                    | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967                                    | Strand  | -                    |
| Start    | 28135                                    | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o4.ts               | Method  | TBLASTX:Soybean      |
| Start    | 22595                                    | End     | 22783                |
| GI       | none                                     | Score   | 202                  |
| Exons    | 22595..22783, 22595..22753, 22600..22776 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967  | Strand  | -                    |
| Start    | 28135  | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 23605  | End     | 25115                |
| GI       | none   | Score   | 50                   |
| Exons    | 23605..23721, 23806..23964, 23813..23968, 23972..24589,<br>23973..24620, 24126..24626, 24733..24873, 24754..24870,<br>24759..24872, 24945..25115, 24949..25113 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22096   | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967   | Strand  | -                    |
| Start    | 28135   | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 23810   | End     | 25671                |
| GI       | none  | Score   | 189                  |
| Exons    | 23810..23974, 23812..23964, 23862..23966, 23970..24620,<br>24008..24616, 24754..24873, 24754..24867, 24936..24995,<br>24958..25134, 25059..25109, 25199..25318, 25201..25224,<br>25203..25331, 25241..25300, 25414..25452, 25621..25671 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967  | Strand  | -                    |
| Start    | 28135  | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 23812  | End     | 25671                |
| GI       | none   | Score   | 179                  |
| Exons    | 23812..23958, 23813..23965, 23970..24620, 24008..24616, 24754..24873, 24754..24867, 24936..24995, 24958..25110, 25203..25331, 25203..25325, 25414..25509, 25621..25671 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096                                    | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967                                    | Strand  | -                    |
| Start    | 28135                                    | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o2.tw               | Method  | TBLASTX:Wheat        |
| Start    | 23985                                    | End     | 24263                |
| GI       | none                                     | Score   | 368                  |
| Exons    | 23985..24263, 24008..24262, 24138..24263 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22096                      | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967                      | Strand  | -                    |
| Start    | 28135                      | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 24267                      | End     | 24617                |
| GI       | none                       | Score   | 390                  |
| Exons    | 24267..24617, 24293..24604 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967  | Strand  | -                    |
| Start    | 28135  | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 25021  | End     | 25671                |
| GI       | none   | Score   | 74                   |
| Exons    | 25021..25134, 25186..25341, 25203..25331, 25217..25348, 25231..25356, 25413..25475, 25618..25665, 25621..25671 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22096  | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967  | Strand  | -                    |
| Start    | 28135  | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 25203  | End     | 25668                |
| GI       | none   | Score   | 217                  |
| Exons    | 25203..25331, 25206..25328, 25413..25514, 25414..25512, 25620..25667, 25621..25668 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22096                      | Seq. ID | OJ990415_09.9819.C13 |
| Gene No. | 45967                      | Strand  | -                    |
| Start    | 28135                      | End     | 28343                |
| Name     | OJ990415_09.9819.C13.o3.gp | Method  | AAT/GAP              |
| Start    | 28135                      | End     | 28343                |
| GI       | 4714794                    | Score   | 383                  |
| Exons    | 28135..28343               |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22097                      | Seq. ID | OJ990415_09.9819.C14 |
| Gene No. | 45968                      | Strand  | +                    |
| Start    | 2009                       | End     | 4789                 |
| Name     | OJ990415_09.9819.C14.o1.gs | Method  | GENSCAN              |



|       |                                    |       |      |
|-------|------------------------------------|-------|------|
| Start | 2009                               | End   | 4789 |
| GI    | none                               | Score | .5   |
| Exons | 2009..2113, 3950..4037, 4566..4789 |       |      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22097  | Seq. ID | OJ990415_09.9819.C14 |
| Gene No.    | 45969  | Strand  | -                    |
| Start       | 1  | End     | 2091                 |
| Name        | OJ990415_09.9819.C14.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 2091                 |
| GI          | 6630695  | Score   | 452                  |
| Exons       | 1..188, 528..756, 1163..1238, 1324..1373, 1455..1517, 1596..1649, 1765..1867, 2000..2091   |         |                      |
| GI Descrip. | (AP000969) ESTs C97915(C0113), C26087(C11614) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22097                      | Seq. ID | OJ990415_09.9819.C14 |
| Gene No. | 45969                      | Strand  | -                    |
| Start    | 1                          | End     | 2091                 |
| Name     | OJ990415_09.9819.C14.o1.gp | Method  | AAT/GAP              |
| Start    | 551                        | End     | 752                  |
| GI       | 426600                     | Score   | 377                  |
| Exons    | 551..752                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22097                      | Seq. ID | OJ990415_09.9819.C14 |
| Gene No. | 45970                      | Strand  | -                    |
| Start    | 4289                       | End     | 4705                 |
| Name     | OJ990415_09.9819.C14.o2.gp | Method  | AAT/GAP              |
| Start    | 4289                       | End     | 4705                 |
| GI       | 3760424                    | Score   | 795                  |
| Exons    | 4289..4705                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22097                      | Seq. ID | OJ990415_09.9819.C14 |
| Gene No. | 45971                      | Strand  | -                    |
| Start    | 7198                       | End     | 7704                 |
| Name     | OJ990415_09.9819.C14.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 533                        | End     | 750                  |
| GI       | none                       | Score   | 179                  |
| Exons    | 533..748, 553..750         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22097  | Seq. ID | OJ990415_09.9819.C14 |
| Gene No. | 45971  | Strand  | -                    |
| Start    | 7198   | End     | 7704                 |
| Name     | OJ990415_09.9819.C14.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 1160   | End     | 1518                 |
| GI       | none   | Score   | 79                   |
| Exons    | 1160..1240, 1161..1241, 1311..1382, 1324..1383, 1434..1511, 1459..1518 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22097  | Seq. ID | OJ990415_09.9819.C14 |
| Gene No. | 45971  | Strand  | -                    |
| Start    | 7198   | End     | 7704                 |
| Name     | OJ990415_09.9819.C14.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1763   | End     | 7605                 |
| GI       | none   | Score   | 81                   |
| Exons    | 1763..1864, 1765..1866, 1769..1867, 1981..2124, 2021..2107, 2174..2260, 2541..2585, 4272..4394, 7510..7605 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22097                      | Seq. ID | OJ990415_09.9819.C14 |
| Gene No. | 45971                      | Strand  | -                    |
| Start    | 7198                       | End     | 7704                 |
| Name     | OJ990415_09.9819.C14.o2.gs | Method  | GENSCAN              |
| Start    | 7198                       | End     | 7704                 |
| GI       | none                       | Score   | .58                  |
| Exons    | 7198..7223, 7506..7704     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22097  | Seq. ID | OJ990415_09.9819.C14 |
| Gene No.    | 45971  | Strand  | -                    |
| Start       | 7198   | End     | 7704                 |
| Name        | OJ990415_09.9819.C14.o3.np                     | Method  | AAT/NAP              |
| Start       | 7432   | End     | 7694                 |
| GI          | 6498424  | Score   | 83                   |
| Exons       | 7432..7694                                     |         |                      |
| GI Descrip. | (AP000815) hypothetical protein [Oryza sativa] |         |                      |

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 22098                             | Seq. ID | OJ990415_09.9819.C15 |
| Gene No. | 45972                             | Strand  | +                    |
| Start    | 849                               | End     | 2175                 |
| Name     | OJ990415_09.9819.C15.o1.gs        | Method  | GENSCAN              |
| Start    | 849                               | End     | 1717                 |
| GI       | none                              | Score   | .67                  |
| Exons    | 849..1104, 1205..1374, 1566..1717 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22098   | Seq. ID | OJ990415_09.9819.C15 |
| Gene No.    | 45972   | Strand  | +                    |
| Start       | 849   | End     | 2175                 |
| Name        | OJ990415_09.9819.C15.o1.np                        | Method  | AAT/NAP              |
| Start       | 935   | End     | 2175                 |
| GI          | 6598445   | Score   | 480                  |
| Exons       | 935..1107, 1205..1374, 1458..1802, 2152..2175     |         |                      |
| GI Descrip. | (AC005168) unknown protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22098                      | Seq. ID | OJ990415_09.9819.C15 |
| Gene No. | 45972                      | Strand  | +                    |
| Start    | 849                        | End     | 2175                 |
| Name     | OJ990415_09.9819.C15.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 1644                       | End     | 1804                 |
| GI       | none                       | Score   | 206                  |
| Exons    | 1644..1802, 1697..1804     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22099  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No.    | 45973  | Strand  | +                    |
| Start       | 1  | End     | 4333                 |
| Name        | OJ990415_09.9819.C16.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 3475                 |
| GI          | 6598445  | Score   | 485                  |
| Exons       | 1..440, 787..982, 1657..1783, 2079..2221, 2336..2455, 2556..2615, 3287..3475 |         |                      |
| GI Descrip. | (AC005168) unknown protein [Arabidopsis thaliana]                            |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22099                      | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45973                      | Strand  | +                    |
| Start    | 1                          | End     | 4333                 |
| Name     | OJ990415_09.9819.C16.o1.gs | Method  | GENSCAN              |

|       |  |       |      |
|-------|--|-------|------|
| Start | 309  | End   | 3499 |
| GI    | none   | Score | .85  |
| Exons | 309..462, 552..662, 815..982, 1657..1783, 2079..2237, 2572..2615, 3287..3499 |       |      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22099  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No.    | 45973  | Strand  | +                    |
| Start       | 1  | End     | 4333                 |
| Name        | OJ990415_09.9819.C16.o1.gp   | Method  | AAT/GAP              |
| Start       | 2398   | End     | 4333                 |
| GI          | 3859_1.R1084   | Score   | 2183                 |
| Exons       | 2398..2455, 2556..2615, 3287..4333   |         |                      |
| GI Descrip. | '3426048 6.0e-26 (AC005168) putative hydroxymethylglutaryl-CoA lyase precursor [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22099  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45974  | Strand  | +                    |
| Start    | 7028   | End     | 7790                 |
| Name     | OJ990415_09.9819.C16.o3.gs                     | Method  | GENSCAN              |
| Start    | 7028   | End     | 7790                 |
| GI       | none   | Score   | .64                  |
| Exons    | 7028..7030, 7224..7350, 7405..7567, 7643..7790 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22099   | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45975   | Strand  | +                    |
| Start    | 9698  | End     | 17284                |
| Name     | OJ990415_09.9819.C16.o4.gs  | Method  | GENSCAN              |
| Start    | 9698  | End     | 17284                |
| GI       | none  | Score   | .75                  |
| Exons    | 9698..10375, 10676..10731, 11743..11866, 11951..12061, 12184..12321, 12437..12505, 12752..12820, 13699..13752, 13831..13972, 14324..14506, 14873..15144, 17114..17284 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22099                                  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45976                                  | Strand  | -                    |
| Start    | 4084                                   | End     | 10203                |
| Name     | OJ990415_09.9819.C16.o2.tc             | Method  | TBLASTX:Cress        |
| Start    | 297                                    | End     | 662                  |
| GI       | none                                   | Score   | 160                  |
| Exons    | 297..461, 301..462, 549..662, 551..661 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22099  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45976  | Strand  | -                    |
| Start    | 4084   | End     | 10203                |
| Name     | OJ990415_09.9819.C16.o2.ts                       | Method  | TBLASTX:Soybean      |
| Start    | 318  | End     | 919                  |
| GI       | none   | Score   | 145                  |
| Exons    | 318..461, 319..462, 549..662, 551..673, 812..919 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22099  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45976  | Strand  | -                    |
| Start    | 4084   | End     | 10203                |
| Name     | OJ990415_09.9819.C16.o5.tm   | Method  | TBLASTX:Maize        |
| Start    | 564  | End     | 2170                 |
| GI       | none   | Score   | 144                  |
| Exons    | 564..662, 565..663, 565..663, 566..676, 566..676, 805..990, 812..1015, 812..973, 814..990, 1654..1749, 1656..1763, |         |                      |

1658..1783, 2071..2169, 2072..2170

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22099  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45976  | Strand  | -                    |
| Start    | 4084   | End     | 10203                |
| Name     | OJ990415_09.9819.C16.o6.tm   | Method  | TBLASTX:Maize        |
| Start    | 2219   | End     | 3475                 |
| GI       | none   | Score   | 37                   |
| Exons    | 2219..2236, 2349..2459, 2351..2470, 2351..2455, 2409..2462, 2541..2615, 2544..2633, 3267..3458, 3279..3464, 3281..3475, 3284..3463 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22099   | Seq. ID | OJ990415_09.9819.C16 |
| Gene No.    | 45976   | Strand  | -                    |
| Start       | 4084  | End     | 10203                |
| Name        | OJ990415_09.9819.C16.o2.np  | Method  | AAT/NAP              |
| Start       | 4066  | End     | 10203                |
| GI          | 6721541   | Score   | 1023                 |
| Exons       | 4066..4317, 4436..4551, 4797..4933, 5029..5192, 5325..5405, 5728..5907, 9675..9802, 10041..10203  |         |                      |
| GI Descrip. | (AP001073) ESTs C97134(C52296),C97133(C52296) correspond to a region of the predicted gene.; Similar to Putative hydroxymethylglutaryl-CoA lyase precursor. (AC005168) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22099  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45976  | Strand  | -                    |
| Start    | 4084   | End     | 10203                |
| Name     | OJ990415_09.9819.C16.o2.gs   | Method  | GENSCAN              |
| Start    | 4084   | End     | 6590                 |
| GI       | none   | Score   | .99                  |
| Exons    | 4084..4317, 4436..4551, 4797..4933, 5029..5192, 5728..5907, 6170..6302, 6472..6590 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22099  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45976  | Strand  | -                    |
| Start    | 4084   | End     | 10203                |
| Name     | OJ990415_09.9819.C16.o3.tm                     | Method  | TBLASTX:Maize        |
| Start    | 4085   | End     | 4285                 |
| GI       | none   | Score   | 243                  |
| Exons    | 4085..4276, 4095..4277, 4120..4284, 4121..4285 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22099  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45976  | Strand  | -                    |
| Start    | 4084   | End     | 10203                |
| Name     | OJ990415_09.9819.C16.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 4120   | End     | 4909                 |
| GI       | none   | Score   | 212                  |
| Exons    | 4120..4338, 4121..4321, 4260..4328, 4401..4535, 4430..4552, 4433..4552, 4437..4553, 4724..4909, 4792..4908 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22099                      | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45976                      | Strand  | -                    |
| Start    | 4084                       | End     | 10203                |
| Name     | OJ990415_09.9819.C16.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 4126                       | End     | 5895                 |
| GI       | none                       | Score   | 221                  |

Exons 4126..4338, 4127..4315, 4138..4320, 4185..4331, 4433..4552, 4440..4553, 4459..4569, 4724..4933, 4771..4935, 4792..4932, 4815..4934, 5019..5114, 5023..5205, 5068..5193, 5325..5408, 5725..5895, 5732..5893

Seq. No. 22099 Seq. ID OJ990415\_09.9819.C16  
Gene No. 45976 Strand -  
Start 4084 End 10203  
Name OJ990415\_09.9819.C16.o1.tm Method TBLASTX:Maize  
Start 4433 End 5884  
GI none Score 114  
Exons 4433..4552, 4433..4552, 4440..4553, 4444..4554, 4724..4933, 4768..4935, 4792..4932, 5019..5114, 5023..5205, 5026..5184, 5325..5408, 5326..5406, 5725..5883, 5726..5884

Seq. No. 22099 Seq. ID OJ990415\_09.9819.C16  
Gene No. 45976 Strand -  
Start 4084 End 10203  
Name OJ990415\_09.9819.C16.o1.tw Method TBLASTX:Wheat  
Start 5325 End 5910  
GI none Score 247  
Exons 5325..5408, 5684..5893, 5715..5891, 5723..5896, 5725..5910, 5734..5895

Seq. No. 22099 Seq. ID OJ990415\_09.9819.C16  
Gene No. 45976 Strand -  
Start 4084 End 10203  
Name OJ990415\_09.9819.C16.o8.tm Method TBLASTX:Maize  
Start 9830 End 9970  
GI none Score 187  
Exons 9830..9964, 9850..9936, 9917..9970

Seq. No. 22099 Seq. ID OJ990415\_09.9819.C16  
Gene No. 45977 Strand -  
Start 11741 End 12321  
Name OJ990415\_09.9819.C16.o2.tw Method TBLASTX:Wheat  
Start 11741 End 12240  
GI none Score 62  
Exons 11741..11806, 11742..11798, 11892..12062, 11915..12061, 11928..12062, 11938..12063, 11938..12063, 11939..12064, 12182..12238, 12183..12239, 12184..12240

Seq. No. 22099 Seq. ID OJ990415\_09.9819.C16  
Gene No. 45977 Strand -  
Start 11741 End 12321  
Name OJ990415\_09.9819.C16.o7.tm Method TBLASTX:Maize  
Start 11965 End 12246  
GI none Score 152  
Exons 11965..12066, 11966..12064, 12182..12244, 12182..12244, 12183..12245, 12183..12245, 12184..12246

Seq. No. 22099 Seq. ID OJ990415\_09.9819.C16  
Gene No. 45977 Strand -  
Start 11741 End 12321  
Name OJ990415\_09.9819.C16.o3.ts Method TBLASTX:Soybean  
Start 12016 End 12321  
GI none Score 73

Exons 12016..12066, 12017..12064, 12183..12320, 12184..12321

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22099  | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45978  | Strand  |                      |
| Start    | 12247  | End     | 12811                |
| Name     | OJ990415_09.9819.C16.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 12247  | End     | 12811                |
| GI       | none   | Score   | 113                  |
| Exons    | 12247..12321, 12247..12312, 12249..12320, 12434..12556,<br>12440..12505, 12598..12645, 12602..12646, 12603..12644,<br>12738..12770, 12749..12811, 12749..12808, 12751..12810 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22099   | Seq. ID | OJ990415_09.9819.C16 |
| Gene No. | 45979   | Strand  |                      |
| Start    | 13560   | End     | 13971                |
| Name     | OJ990415_09.9819.C16.o2.tm  | Method  | TBLASTX:Maize        |
| Start    | 13560   | End     | 13971                |
| GI       | none  | Score   | 104                  |
| Exons    | 13560..13616, 13562..13615, 13698..13751, 13699..13755,<br>13699..13752, 13828..13971, 13828..13872 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22100  | Seq. ID | OJ990415_09.9819.C17 |
| Gene No.    | 45980  | Strand  | +                    |
| Start       | 1  | End     | 2729                 |
| Name        | OJ990415_09.9819.C17.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 2622                 |
| GI          | 3377509  | Score   | 1381                 |
| Exons       | 1..1070, 1342..1614, 1725..1810, 1911..2068, 2159..2235,<br>2559..2622 |         |                      |
| GI Descrip. | (AF056027) auxin transport protein REH1 [Oryza sativa]                 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22100   | Seq. ID | OJ990415_09.9819.C17 |
| Gene No. | 45980   | Strand  | +                    |
| Start    | 1   | End     | 2729                 |
| Name     | OJ990415_09.9819.C17.o1.gs                              | Method  | GENSCAN              |
| Start    | 56  | End     | 2729                 |
| GI       | none  | Score   | .95                  |
| Exons    | 56..968, 1365..1614, 1725..1810, 1911..2068, 2559..2729 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22100  | Seq. ID | OJ990415_09.9819.C17 |
| Gene No.    | 45980  | Strand  | +                    |
| Start       | 1  | End     | 2729                 |
| Name        | OJ990415_09.9819.C17.o1.gp   | Method  | AAT/GAP              |
| Start       | 1346   | End     | 1762                 |
| GI          | 2310765  | Score   | 476                  |
| Exons       | 1346..1614, 1725..1762   |         |                      |
| GI Descrip. | 3377509 2.0e-24 (AF056027) auxin transport protein REH1 [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22100                      | Seq. ID | OJ990415_09.9819.C17 |
| Gene No. | 45981                      | Strand  | -                    |
| Start    | 4091                       | End     | 4180                 |
| Name     | OJ990415_09.9819.C17.o3.tm | Method  | TBLASTX:Maize        |
| Start    | 25                         | End     | 186                  |
| GI       | none                       | Score   | 224                  |
| Exons    | 25..186, 35..169           |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22100  | Seq. ID | OJ990415_09.9819.C17 |
| Gene No. | 45981  | Strand  | -                    |
| Start    | 4091   | End     | 4180                 |
| Name     | OJ990415_09.9819.C17.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 35   | End     | 2655                 |
| GI       | none   | Score   | 212                  |
| Exons    | 35..169, 37..315, 227..316, 337..459, 338..502, 383..502, 623..769, 664..738, 832..894, 836..895, 1350..1424, 1379..1444, 1486..1629, 1487..1615, 1720..1827, 1722..1817, 1886..2074, 1909..2061, 2156..2236, 2157..2231, 2158..2235, 2542..2655, 2559..2630 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22100                      | Seq. ID | OJ990415_09.9819.C17 |
| Gene No. | 45981                      | Strand  | -                    |
| Start    | 4091                       | End     | 4180                 |
| Name     | OJ990415_09.9819.C17.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 35                         | End     | 183                  |
| GI       | none                       | Score   | 215                  |
| Exons    | 35..169, 37..183           |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22100  | Seq. ID | OJ990415_09.9819.C17 |
| Gene No. | 45981  | Strand  | -                    |
| Start    | 4091   | End     | 4180                 |
| Name     | OJ990415_09.9819.C17.o2.tm                       | Method  | TBLASTX:Maize        |
| Start    | 230  | End     | 505                  |
| GI       | none   | Score   | 130                  |
| Exons    | 230..316, 244..315, 331..459, 338..502, 383..505 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22100  | Seq. ID | OJ990415_09.9819.C17 |
| Gene No. | 45981  | Strand  | -                    |
| Start    | 4091   | End     | 4180                 |
| Name     | OJ990415_09.9819.C17.o2.ts                       | Method  | TBLASTX:Soybean      |
| Start    | 239  | End     | 502                  |
| GI       | none   | Score   | 129                  |
| Exons    | 239..316, 241..315, 331..462, 338..502, 383..496 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22100  | Seq. ID | OJ990415_09.9819.C17 |
| Gene No. | 45981  | Strand  | -                    |
| Start    | 4091   | End     | 4180                 |
| Name     | OJ990415_09.9819.C17.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 851  | End     | 2625                 |
| GI       | none   | Score   | 75                   |
| Exons    | 851..895, 1379..1402, 1429..1629, 1454..1615, 1531..1617, 1693..1827, 1719..1814, 1720..1827, 1886..2074, 1886..1969, 1909..2067, 2071..2211, 2151..2225, 2154..2216, 2155..2232, 2156..2233, 2542..2625 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22100  | Seq. ID | OJ990415_09.9819.C17 |
| Gene No. | 45981  | Strand  | -                    |
| Start    | 4091   | End     | 4180                 |
| Name     | OJ990415_09.9819.C17.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1526   | End     | 2622                 |
| GI       | none   | Score   | 135                  |
| Exons    | 1526..1615, 1532..1615, 1546..1617, 1560..1616, 1693..1827, 1719..1817, 1720..1827, 1886..2074, 1909..2064, 1911..2093, 2156..2233, 2158..2232, 2545..2622 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22100  | Seq. ID | OJ990415_09.9819.C17 |
| Gene No. | 45981  | Strand  | -                    |
| Start    | 4091   | End     | 4180                 |
| Name     | OJ990415_09.9819.C17.o1.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 1526   | End     | 2212                 |
| GI       | none   | Score   | 87                   |
| Exons    | 1526..1615, 1526..1606, 1907..2074, 1909..2064, 2156..2212 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22100                      | Seq. ID | OJ990415_09.9819.C17 |
| Gene No. | 45981                      | Strand  | -                    |
| Start    | 4091                       | End     | 4180                 |
| Name     | OJ990415_09.9819.C17.o2.gs | Method  | GENSCAN              |
| Start    | 4091                       | End     | 4180                 |
| GI       | none                       | Score   | .62                  |
| Exons    | 4091..4180                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22101  | Seq. ID | OJ990415_09.9819.C18 |
| Gene No.    | 45982  | Strand  | +                    |
| Start       | 1  | End     | 3992                 |
| Name        | OJ990415_09.9819.C18.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 2076                 |
| GI          | 4150963  | Score   | 83                   |
| Exons       | 1..56, 1252..1364, 1779..1831, 1956..2076      |         |                      |
| GI Descrip. | (Y18620) DsPTP1 protein [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22101  | Seq. ID | OJ990415_09.9819.C18 |
| Gene No.    | 45982  | Strand  | +                    |
| Start       | 1  | End     | 3992                 |
| Name        | OJ990415_09.9819.C18.o1.gp   | Method  | AAT/GAP              |
| Start       | 870  | End     | 2188                 |
| GI          | 4714793  | Score   | 1308                 |
| Exons       | 870..1364, 1779..1831, 1956..2020, 2100..2188  |         |                      |
| GI Descrip. | 6005956/ref NP_009171.1 pYVH1  2.0e-15 S. cerevisiae YVH1 protein-tyrosine phosphatase ortholog<br>>gi_5764099_gb_AAD51134.1_AF119226_1 (AF119226) dual-specificity tyrosine phosphatase YVH1 [Homo sapiens] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22101   | Seq. ID | OJ990415_09.9819.C18 |
| Gene No. | 45982   | Strand  | +                    |
| Start    | 1   | End     | 3992                 |
| Name     | OJ990415_09.9819.C18.o1.gs  | Method  | GENSCAN              |
| Start    | 946   | End     | 2948                 |
| GI       | none  | Score   | .93                  |
| Exons    | 946..1364, 1779..1831, 1956..2020, 2100..2178, 2597..2896, 2929..2948 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22101  | Seq. ID | OJ990415_09.9819.C18 |
| Gene No.    | 45982  | Strand  | +                    |
| Start       | 1  | End     | 3992                 |
| Name        | OJ990415_09.9819.C18.o2.np                                       | Method  | AAT/NAP              |
| Start       | 977  | End     | 3992                 |
| GI          | 2832664  | Score   | 229                  |
| Exons       | 977..1003, 2710..2896, 3143..3245, 3897..3992                    |         |                      |
| GI Descrip. | (AL021710) pollen-specific protein - like [Arabidopsis thaliana] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22101 | Seq. ID | OJ990415_09.9819.C18 |
| Gene No. | 45982 | Strand  | +                    |



|       |                            |        |         |
|-------|----------------------------|--------|---------|
| Start | 1                          | End    | 3992    |
| Name  | OJ990415_09.9819.C18.o2.gp | Method | AAT/GAP |
| Start | 3395                       | End    | 3603    |
| GI    | 4714794                    | Score  | 383     |
| Exons | 3395..3603                 |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22101  | Seq. ID | OJ990415_09.9819.C18 |
| Gene No. | 45983  | Strand  | -                    |
| Start    | 3352   | End     | 3888                 |
| Name     | OJ990415_09.9819.C18.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 906  | End     | 1981                 |
| GI       | none   | Score   | 76                   |
| Exons    | 906..980, 925..987, 1035..1364, 1042..1362, 1280..1369, 1281..1364, 1777..1830, 1780..1830, 1782..1832, 1949..1981 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22101  | Seq. ID | OJ990415_09.9819.C18 |
| Gene No. | 45983  | Strand  | -                    |
| Start    | 3352   | End     | 3888                 |
| Name     | OJ990415_09.9819.C18.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 946  | End     | 3288                 |
| GI       | none   | Score   | 40                   |
| Exons    | 946..987, 1038..1112, 1042..1113, 1165..1362, 1225..1347, 1230..1364, 1777..1830, 1936..2034, 1949..2023, 2093..2176, 2097..2171, 2707..2826, 2716..2805, 2718..2864, 2839..2889, 3102..3257, 3142..3288, 3151..3273 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22101  | Seq. ID | OJ990415_09.9819.C18 |
| Gene No. | 45983  | Strand  | -                    |
| Start    | 3352   | End     | 3888                 |
| Name     | OJ990415_09.9819.C18.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 2637   | End     | 3231                 |
| GI       | none   | Score   | 37                   |
| Exons    | 2637..2660, 2638..2676, 2671..2895, 2676..2894, 2711..2896, 3140..3229, 3140..3229, 3141..3230, 3142..3231 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22101                      | Seq. ID | OJ990415_09.9819.C18 |
| Gene No. | 45983                      | Strand  | -                    |
| Start    | 3352                       | End     | 3888                 |
| Name     | OJ990415_09.9819.C18.o2.gs | Method  | GENSCAN              |
| Start    | 3352                       | End     | 3888                 |
| GI       | none                       | Score   | .77                  |
| Exons    | 3352..3449, 3789..3888     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22102  | Seq. ID | OJ990415_09.9819.C19 |
| Gene No.    | 45984  | Strand  | +                    |
| Start       | 1  | End     | 838                  |
| Name        | OJ990415_09.9819.C19.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 838                  |
| GI          | 6630695  | Score   | 196                  |
| Exons       | 1..113, 204..253, 333..408, 599..838   |         |                      |
| GI Descrip. | (AP000969) ESTs C97915(C0113), C26087(C11614) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22102 | Seq. ID | OJ990415_09.9819.C19 |
| Gene No. | 45984 | Strand  | +                    |
| Start    | 1     | End     | 838                  |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990415_09.9819.C19.o1.tm                               | Method | TBLASTX:Maize |
| Start | 50   | End    | 414           |
| GI    | none   | Score  | 94            |
| Exons | 50..112, 51..113, 192..257, 197..253, 325..414, 330..413 |        |               |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22103                        | Seq. ID | OJ990415_09.9819.C20 |
| Gene No. | 45985                        | Strand  | -                    |
| Start    | 219                          | End     | 595                  |
| Name     | OJ990415_09.9819.C20.o1.gs   | Method  | GENSCAN              |
| Start    | 219                          | End     | 595                  |
| GI       | none                         | Score   | .47                  |
| Exons    | 219..335, 406..525, 593..595 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22104                      | Seq. ID | OJ990415_09.9819.C21 |
| Gene No. | 45986                      | Strand  | +                    |
| Start    | 101                        | End     | 327                  |
| Name     | OJ990415_09.9819.C21.o1.gs | Method  | GENSCAN              |
| Start    | 101                        | End     | 327                  |
| GI       | none                       | Score   | .91                  |
| Exons    | 101..327                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22104  | Seq. ID | OJ990415_09.9819.C21 |
| Gene No. | 45987  | Strand  | +                    |
| Start    | 15763  | End     | 24328                |
| Name     | OJ990415_09.9819.C21.o5.np   | Method  | AAT/NAP              |
| Start    | 15760  | End     | 24328                |
| GI       | 6598445  | Score   | 1230                 |
| Exons    | 15760..15969, 16352..16519, 16872..17008, 17087..17198, 17269..17438, 17484..17589, 18381..18561, 20087..20198, 22203..22262, 22608..22726, 22831..23226, 23303..23467, 23558..23614, 24205..24328 |         |                      |

GI Descrip. (AC005168), unknown protein [Arabidopsis thaliana]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22104  | Seq. ID | OJ990415_09.9819.C21 |
| Gene No. | 45987  | Strand  | +                    |
| Start    | 15763  | End     | 24328                |
| Name     | OJ990415_09.9819.C21.o3.gs   | Method  | GENSCAN              |
| Start    | 15763  | End     | 23467                |
| GI       | none   | Score   | .77                  |
| Exons    | 15763..15945, 16352..16519, 16613..16702, 16872..17008, 17087..17177, 17319..17401, 17483..17589, 18381..18533, 19920..19998, 20090..20198, 20386..20472, 22203..22262, 22608..22726, 22831..23206, 23283..23467 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22104   | Seq. ID | OJ990415_09.9819.C21 |
| Gene No. | 45988   | Strand  | -                    |
| Start    | 682   | End     | 15352                |
| Name     | OJ990415_09.9819.C21.o2.gs  | Method  | GENSCAN              |
| Start    | 682   | End     | 15278                |
| GI       | none  | Score   | .58                  |
| Exons    | 682..927, 1193..1304, 1664..1745, 2705..2808, 2993..3129, 3515..3667, 4328..4355, 4445..4554, 5248..5379, 5758..5878, 6357..6476, 6481..6524, 6592..6870, 9219..9302, 9665..9862, 9971..10189, 10476..10661, 11333..11516, 11602..11711, 13854..13977, 15172..15278 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22104 | Seq. ID | OJ990415_09.9819.C21 |
|----------|-------|---------|----------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 45988  | Strand | -             |
| Start    | 682  | End    | 15352         |
| Name     | OJ990415_09.9819.C21.o1.tm   | Method | TBLASTX:Maize |
| Start    | 3513   | End    | 15290         |
| GI       | none   | Score  | 81            |
| Exons    | 3513..3542, 3581..3673, 4177..4341, 4277..4357, 4433..4465, 4444..4572, 4497..4550, 5758..5880, 5759..5872, 6371..6478, 10524..10667, 10532..10669, 10546..10677, 11333..11524, 11338..11520, 11598..11714, 11599..11706, 12501..12572, 12510..12572, 12512..12580, 12515..12634, 13835..13966, 13846..13974, 13854..13976, 15160..15243, 15171..15233, 15234..15290, 15247..15285 |        |               |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22104  | Seq. ID | OJ990415_09.9819.C21 |
| Gene No.    | 45988  | Strand  | -                    |
| Start       | 682  | End     | 15352                |
| Name        | OJ990415_09.9819.C21.o3.np   | Method  | AAT/NAP              |
| Start       | 3550   | End     | 6475                 |
| GI          | 5262221  | Score   | 272                  |
| Exons       | 3550..3661, 4166..4310, 4442..4554, 5248..5321, 5754..5878, 6357..6475 |         |                      |
| GI Descrip. | (AL080254) putative protein [Arabidopsis thaliana]                     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22104  | Seq. ID | OJ990415_09.9819.C21 |
| Gene No.    | 45988  | Strand  | -                    |
| Start       | 682  | End     | 15352                |
| Name        | OJ990415_09.9819.C21.o1.np   | Method  | AAT/NAP              |
| Start       | 3572   | End     | 5906                 |
| GI          | 3850583  | Score   | 292                  |
| Exons       | 3572..3667, 4172..4355, 4445..4558, 5225..5357, 5754..5906   |         |                      |
| GI Descrip. | (AC005278) Contains similarity to transcription initiation factor IIE, alpha subunit gb X63468 from Homo sapiens. [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22104  | Seq. ID | OJ990415_09.9819.C21 |
| Gene No. | 45988  | Strand  | -                    |
| Start    | 682  | End     | 15352                |
| Name     | OJ990415_09.9819.C21.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3584   | End     | 12633                |
| GI       | none   | Score   | 75                   |
| Exons    | 3584..3673, 4170..4256, 4171..4293, 4277..4357, 4444..4572, 10473..10541, 10474..10587, 10569..10667, 10578..10667, 11333..11506, 11333..11518, 11598..11714, 11610..11714, 11638..11715, 12510..12572, 12517..12570, 12562..12633 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22104  | Seq. ID | OJ990415_09.9819.C21 |
| Gene No.    | 45988  | Strand  | -                    |
| Start       | 682  | End     | 15352                |
| Name        | OJ990415_09.9819.C21.o2.np                         | Method  | AAT/NAP              |
| Start       | 4157   | End     | 5968                 |
| GI          | 5738379  | Score   | 216                  |
| Exons       | 4157..4355, 4445..4554, 5248..5357, 5754..5968     |         |                      |
| GI Descrip. | (AL080253) putative protein [Arabidopsis thaliana] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22104 | Seq. ID | OJ990415_09.9819.C21 |
| Gene No. | 45988 | Strand  | -                    |
| Start    | 682   | End     | 15352                |

Name OJ990415\_09.9819.C21.o4.np Method AAT/NAP  
 Start 9186 End 15352  
 GI 3850583 Score 607  
 Exons 9186..9248, 9614..9862, 9917..10189, 10476..10658, 11330..11516,  
 11602..11716, 12491..12638, 13854..13974, 15172..15352  
 GI Descrip. (AC005278) Contains similarity to transcription initiation  
 factor IIE, alpha subunit gb|X63468 from Homo sapiens.  
 [Arabidopsis thaliana]

Seq. No. 22105 Seq. ID OJ990415\_09.9819.C22  
 Gene No. 45989 Strand +  
 Start 1 End 4243  
 Name OJ990415\_09.9819.C22.o1.np Method AAT/NAP  
 Start 1 End 4243  
 GI 6598445 Score 1998  
 Exons 1..375, 1032..1199, 1306..1599, 1998..2174, 2310..2592,  
 2809..3095, 3205..3540, 3706..3837, 4151..4243  
 GI Descrip. (AC005168) unknown protein [Arabidopsis thaliana]

Seq. No. 22105 Seq. ID OJ990415\_09.9819.C22  
 Gene No. 45989 Strand +  
 Start 1 End 4243  
 Name OJ990415\_09.9819.C22.o2.ts Method TBLASTX:Soybean  
 Start 217 End 1202  
 GI none Score 206  
 Exons 217..375, 270..377, 1029..1196, 1031..1201, 1032..1202

Seq. No. 22105 Seq. ID OJ990415\_09.9819.C22  
 Gene No. 45989 Strand +  
 Start 1 End 4243  
 Name OJ990415\_09.9819.C22.o1.gs Method GENSCAN  
 Start 223 End 4059  
 GI none Score .91  
 Exons 223..375, 1032..1199, 1306..1599, 1998..2174, 2310..2573,  
 2710..2808, 2911..3095, 3205..3540, 3706..3859, 3949..4059

Seq. No. 22105 Seq. ID OJ990415\_09.9819.C22  
 Gene No. 45989 Strand +  
 Start 1 End 4243  
 Name OJ990415\_09.9819.C22.o3.ts Method TBLASTX:Soybean  
 Start 2040 End 2465  
 GI none Score 35  
 Exons 2040..2096, 2133..2177, 2301..2465, 2309..2464

Seq. No. 22105 Seq. ID OJ990415\_09.9819.C22  
 Gene No. 45989 Strand +  
 Start 1 End 4243  
 Name OJ990415\_09.9819.C22.o1.tm Method TBLASTX:Maize  
 Start 2919 End 4036  
 GI none Score 250  
 Exons 2919..3095, 2920..3084, 2923..3096, 3199..3321, 3202..3540,  
 3203..3544, 3691..3768, 3698..3766, 3703..3783, 3705..3782,  
 3769..3858, 3770..3859, 3946..4035, 3947..4036, 3948..4034

Seq. No. 22105 Seq. ID OJ990415\_09.9819.C22  
 Gene No. 45989 Strand +  
 Start 1 End 4243

|          |  |         |                      |
|----------|--|---------|----------------------|
| Name     | OJ990415_09.9819.C22.ol.tw   | Method  | TBLASTX:Wheat        |
| Start    | 3072   | End     | 3544                 |
| GI       | none   | Score   | 50                   |
| Exons    | 3072..3095, 3194..3532, 3203..3544, 3204..3539                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22105  | Seq. ID | OJ990415_09.9819.C22 |
| Gene No. | 45989  | Strand  | +                    |
| Start    | 1  | End     | 4243                 |
| Name     | OJ990415_09.9819.C22.ol.tc   | Method  | TBLASTX:Cress        |
| Start    | 3364   | End     | 4059                 |
| GI       | none   | Score   | 161                  |
| Exons    | 3364..3540, 3365..3544, 3694..3858, 3698..3859, 3946..4059, 3948..4058 |         |                      |
|          |  |         |                      |
| Seq. No. | 22105  | Seq. ID | OJ990415_09.9819.C22 |
| Gene No. | 45989  | Strand  | +                    |
| Start    | 1  | End     | 4243                 |
| Name     | OJ990415_09.9819.C22.ol.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3715   | End     | 4070                 |
| GI       | none   | Score   | 145                  |
| Exons    | 3715..3858, 3716..3859, 3946..4059, 3948..4070                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22106  | Seq. ID | OJ990415_09.9819.C23 |
| Gene No. | 45990  | Strand  | +                    |
| Start    | 233  | End     | 546                  |
| Name     | OJ990415_09.9819.C23.ol.gs   | Method  | GENSCAN              |
| Start    | 233  | End     | 546                  |
| GI       | none   | Score   | .41                  |
| Exons    | 233..314, 515..546   |         |                      |
|          |  |         |                      |
| Seq. No. | 22107  | Seq. ID | OJ990415_09.9819.C24 |
| Gene No. | 45991  | Strand  | -                    |
| Start    | 98   | End     | 322                  |
| Name     | OJ990415_09.9819.C24.ol.gs   | Method  | GENSCAN              |
| Start    | 98   | End     | 322                  |
| GI       | none   | Score   | .52                  |
| Exons    | 98..322  |         |                      |
|          |  |         |                      |
| Seq. No. | 22108  | Seq. ID | OJ990415_09.9819.C25 |
| Gene No. | 45992  | Strand  | -                    |
| Start    | 146  | End     | 628                  |
| Name     | OJ990415_09.9819.C25.ol.gs   | Method  | GENSCAN              |
| Start    | 146  | End     | 628                  |
| GI       | none   | Score   | .67                  |
| Exons    | 146..362, 496..628   |         |                      |
|          |  |         |                      |
| Seq. No. | 22108  | Seq. ID | OJ990415_09.9819.C25 |
| Gene No. | 45992  | Strand  | -                    |
| Start    | 146  | End     | 628                  |
| Name     | OJ990415_09.9819.C25.ol.tm   | Method  | TBLASTX:Maize        |
| Start    | 153  | End     | 369                  |
| GI       | none   | Score   | 159                  |
| Exons    | 153..362, 153..362, 154..363, 160..369                                 |         |                      |
|          |  |         |                      |
| Seq. No. | 22108  | Seq. ID | OJ990415_09.9819.C25 |
| Gene No. | 45992  | Strand  | -                    |
| Start    | 146  | End     | 628                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Name        | OJ990415_09.9819.C25.ol.ts                | Method  | TBLASTX:Soybean      |
| Start       | 255                                       | End     | 607                  |
| GI          | none                                      | Score   | 92                   |
| Exons       | 255..344, 256..348, 494..607, 496..606    |         |                      |
|             |   |         |                      |
| Seq. No.    | 22109                                     | Seq. ID | OJ990415_09.9819.C26 |
| Gene No.    | 45993                                     | Strand  | +                    |
| Start       | 1   | End     | 851                  |
| Name        | OJ990415_09.9819.C26.ol.np                | Method  | AAT/NAP              |
| Start       | 1   | End     | 851                  |
| GI          | 4929629                                   | Score   | 85                   |
| Exons       | 1..291, 803..851                          |         |                      |
| GI Descrip. | (AF151838) CGI-80 protein [Homo sapiens]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22109                                     | Seq. ID | OJ990415_09.9819.C26 |
| Gene No.    | 45993                                     | Strand  | +                    |
| Start       | 1   | End     | 851                  |
| Name        | OJ990415_09.9819.C26.ol.ts                | Method  | TBLASTX:Soybean      |
| Start       | 108                                       | End     | 296                  |
| GI          | none                                      | Score   | 202                  |
| Exons       | 108..296, 108..266, 113..289              |         |                      |
|             |   |         |                      |
| Seq. No.    | 22109                                     | Seq. ID | OJ990415_09.9819.C26 |
| Gene No.    | 45993                                     | Strand  | +                    |
| Start       | 1   | End     | 851                  |
| Name        | OJ990415_09.9819.C26.ol.gs                | Method  | GENSCAN              |
| Start       | 116                                       | End     | 559                  |
| GI          | none                                      | Score   | .75                  |
| Exons       | 116..287, 365..559                        |         |                      |
|             |   |         |                      |
| Seq. No.    | 22110                                     | Seq. ID | OJ990415_09.9819.C27 |
| Gene No.    | 45994                                     | Strand  | +                    |
| Start       | 127                                       | End     | 804                  |
| Name        | OJ990415_09.9819.C27.ol.gs                | Method  | GENSCAN              |
| Start       | 127                                       | End     | 804                  |
| GI          | none                                      | Score   | .97                  |
| Exons       | 127..305, 599..804                        |         |                      |
|             |   |         |                      |
| Seq. No.    | 22111                                     | Seq. ID | OJ990605_40.9919.C1  |
| Gene No.    | 45995                                     | Strand  | -                    |
| Start       | 1   | End     | 1370                 |
| Name        | OJ990605_40.9919.C1.ol.np                 | Method  | AAT/NAP              |
| Start       | 1   | End     | 1370                 |
| GI          | 3056594                                   | Score   | 290                  |
| Exons       | 1..239, 267..1370                         |         |                      |
| GI Descrip. | (AC004255) T1F9.15 [Arabidopsis thaliana] |         |                      |
|             |   |         |                      |
| Seq. No.    | 22111                                     | Seq. ID | OJ990605_40.9919.C1  |
| Gene No.    | 45995                                     | Strand  | -                    |
| Start       | 1   | End     | 1370                 |
| Name        | OJ990605_40.9919.C1.ol.gs                 | Method  | GENSCAN              |
| Start       | 147                                       | End     | 1339                 |
| GI          | none                                      | Score   | .42                  |
| Exons       | 147..929, 982..1061, 1148..1339           |         |                      |
|             |   |         |                      |
| Seq. No.    | 22111                                     | Seq. ID | OJ990605_40.9919.C1  |
| Gene No.    | 45995                                     | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 1  | End    | 1370          |
| Name  | OJ990605_40.9919.C1.o1.tm                                  | Method | TBLASTX:Maize |
| Start | 194  | End    | 414           |
| GI    | none   | Score  | 59            |
| Exons | 194..268, 209..253, 244..399, 255..398, 257..412, 271..414 |        |               |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22111  | Seq. ID | OJ990605_40.9919.C1 |
| Gene No.    | 45995  | Strand  | -                   |
| Start       | 1  | End     | 1370                |
| Name        | OJ990605_40.9919.C1.o2.np  | Method  | AAT/NAP             |
| Start       | 221  | End     | 1285                |
| GI          | 6651300  | Score   | 306                 |
| Exons       | 221..1285  |         |                     |
| GI Descrip. | (AF161333) S-locus related 1 [Raphanus raphanistrum subsp. raphanistrum] |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22111   | Seq. ID | OJ990605_40.9919.C1 |
| Gene No. | 45995   | Strand  | -                   |
| Start    | 1   | End     | 1370                |
| Name     | OJ990605_40.9919.C1.o2.tm   | Method  | TBLASTX:Maize       |
| Start    | 809   | End     | 1190                |
| GI       | none  | Score   | 106                 |
| Exons    | 809..919, 951..974, 972..1013, 1057..1185, 1058..1189, 1059..1190 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22112  | Seq. ID | OJ990605_40.9919.C2 |
| Gene No.    | 45996  | Strand  | +                   |
| Start       | 2340   | End     | 2810                |
| Name        | OJ990605_40.9919.C2.o1.gp  | Method  | AAT/GAP             |
| Start       | 2340   | End     | 2810                |
| GI          | LIB3432-020-P1-K1-H1   | Score   | 889                 |
| Exons       | 2340..2810   |         |                     |
| GI Descrip. | '2735017 1.0e-40 (U82481) KI domain interacting kinase 1 [Zea mays]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22112  | Seq. ID | OJ990605_40.9919.C2 |
| Gene No. | 45997  | Strand  | -                   |
| Start    | 356  | End     | 7295                |
| Name     | OJ990605_40.9919.C2.o1.gs  | Method  | GENSCAN             |
| Start    | 356  | End     | 4842                |
| GI       | none   | Score   | .84                 |
| Exons    | 356..674, 706..840, 1814..1899, 2009..2159, 2293..2383, 2635..2878, 2949..3127, 3594..4842 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22112  | Seq. ID | OJ990605_40.9919.C2 |
| Gene No.    | 45997  | Strand  | -                   |
| Start       | 356  | End     | 7295                |
| Name        | OJ990605_40.9919.C2.o1.np  | Method  | AAT/NAP             |
| Start       | 1600   | End     | 7295                |
| GI          | 6686398  | Score   | 1872                |
| Exons       | 1600..1899, 2009..2159, 2293..2530, 2635..2845, 2949..3127, 3293..3434, 3582..4783, 5569..5873, 5958..6108, 6213..6450, 6545..6755, 6836..6972, 7262..7295 |         |                     |
| GI Descrip. | (AC007234) F1E22.15 [Arabidopsis thaliana]   |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22112 | Seq. ID | OJ990605_40.9919.C2 |
| Gene No. | 45997 | Strand  | -                   |

|       |  |        |                 |
|-------|--|--------|-----------------|
| Start | 356  | End    | 7295            |
| Name  | OJ990605_40.9919.C2.o2.ts                      | Method | TBLASTX:Soybean |
| Start | 1685   | End    | 5768            |
| GI    | none   | Score  | 71              |
| Exons | 1685..1801, 1687..1917, 5653..5766, 5658..5768 |        |                 |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22112  | Seq. ID | OJ990605_40.9919.C2 |
| Gene No. | 45997  | Strand  | -                   |
| Start    | 356  | End     | 7295                |
| Name     | OJ990605_40.9919.C2.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 1687   | End     | 6919                |
| GI       | none   | Score   | 85                  |
| Exons    | 1687..1914, 2051..2155, 2052..2156, 2293..2493, 2298..2465, 2316..2510, 2341..2511, 2635..2790, 2636..2791, 2636..2848, 2706..2846, 2937..3029, 5661..5885, 5736..5837, 5980..6105, 5991..6104, 6016..6105, 6216..6431, 6233..6460, 6531..6677, 6539..6670, 6546..6764, 6616..6699, 6836..6919 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22112  | Seq. ID | OJ990605_40.9919.C2 |
| Gene No. | 45997  | Strand  | -                   |
| Start    | 356  | End     | 7295                |
| Name     | OJ990605_40.9919.C2.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 1696   | End     | 6940                |
| GI       | none   | Score   | 66                  |
| Exons    | 1696..1749, 1733..1825, 1735..1929, 1856..1900, 1997..2158, 2019..2159, 2059..2160, 2271..2513, 2316..2513, 2344..2514, 2607..2846, 2636..2848, 2636..2848, 2949..3059, 5643..5702, 5670..5699, 5698..5778, 5712..5885, 5821..5886, 6001..6108, 6012..6107, 6026..6109, 6213..6431, 6233..6460, 6546..6764, 6601..6699, 6836..6940 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22112  | Seq. ID | OJ990605_40.9919.C2 |
| Gene No. | 45997  | Strand  | -                   |
| Start    | 356  | End     | 7295                |
| Name     | OJ990605_40.9919.C2.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 2048   | End     | 6916                |
| GI       | none   | Score   | 64                  |
| Exons    | 2048..2161, 2064..2162, 2316..2522, 2328..2507, 2341..2523, 2636..2848, 2637..2846, 2949..3020, 5769..5873, 5964..6110, 6013..6144, 6230..6442, 6249..6440, 6546..6764, 6836..6916 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22112  | Seq. ID | OJ990605_40.9919.C2 |
| Gene No. | 45997  | Strand  | -                   |
| Start    | 356  | End     | 7295                |
| Name     | OJ990605_40.9919.C2.o2.tw  | Method  | TBLASTX:Wheat       |
| Start    | 2048   | End     | 6335                |
| GI       | none   | Score   | 110                 |
| Exons    | 2048..2158, 2052..2159, 2295..2414, 2296..2415, 2316..2414, 5832..5873, 5964..6107, 6001..6108, 6215..6334, 6216..6335, 6233..6334 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22112                     | Seq. ID | OJ990605_40.9919.C2 |
| Gene No. | 45997                     | Strand  | -                   |
| Start    | 356                       | End     | 7295                |
| Name     | OJ990605_40.9919.C2.o1.tw | Method  | TBLASTX:Wheat       |
| Start    | 2416                      | End     | 6758                |
| GI       | none                      | Score   | 69                  |



Exons 2416..2547, 2416..2505, 2418..2513, 2636..2848, 2640..2846,  
6336..6500, 6338..6460, 6546..6758, 6598..6702

Seq. No. 22112 Seq. ID OJ990605\_40.9919.C2  
Gene No. 45997 Strand -  
Start 356 End 7295  
Name OJ990605\_40.9919.C2.o3.tm Method TBLASTX:Maize  
Start 3643 End 3871  
GI none Score 58  
Exons 3643..3696, 3653..3694, 3685..3846, 3698..3871, 3699..3830,  
3758..3841

Seq. No. 22112 Seq. ID OJ990605\_40.9919.C2  
Gene No. 45997 Strand -  
Start 356 End 7295  
Name OJ990605\_40.9919.C2.o2.tc Method TBLASTX:Cress  
Start 3913 End 4752  
GI none Score 75  
Exons 3913..3939, 3964..4002, 4015..4104, 4234..4353, 4393..4752,  
4394..4528

Seq. No. 22112 Seq. ID OJ990605\_40.9919.C2  
Gene No. 45997 Strand -  
Start 356 End 7295  
Name OJ990605\_40.9919.C2.o3.ts Method TBLASTX:Soybean  
Start 4310 End 4689  
GI none Score 84  
Exons 4310..4438, 4315..4440, 4459..4524, 4510..4689

Seq. No. 22112 Seq. ID OJ990605\_40.9919.C2  
Gene No. 45997 Strand -  
Start 356 End 7295  
Name OJ990605\_40.9919.C2.o2.tm Method TBLASTX:Maize  
Start 4311 End 4794  
GI none Score 35  
Exons 4311..4355, 4369..4497, 4406..4486, 4411..4494, 4413..4520,  
4490..4675, 4504..4689, 4511..4675, 4539..4679, 4681..4794,  
4699..4791

Seq. No. 22112 Seq. ID OJ990605\_40.9919.C2  
Gene No. 45997 Strand -  
Start 356 End 7295  
Name OJ990605\_40.9919.C2.o2.gs Method GENSCAN  
Start 5571 End 6355  
GI none Score .65  
Exons 5571..5873, 5958..6108, 6213..6355

Seq. No. 22113 Seq. ID OJ990605\_40.9919.C3  
Gene No. 45998 Strand +  
Start 416 End 1298  
Name OJ990605\_40.9919.C3.o1.gs Method GENSCAN  
Start 416 End 1298  
GI none Score .8  
Exons 416..551, 688..814, 849..1298

Seq. No. 22113 Seq. ID OJ990605\_40.9919.C3  
Gene No. 45998 Strand +

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 416  | End    | 1298    |
| Name        | OJ990605_40.9919.C3.o1.np                              | Method | AAT/NAP |
| Start       | 788  | End    | 1298    |
| GI          | 2347189  | Score  | 152     |
| Exons       | 788..1298  |        |         |
| GI Descrip. | (AC002338) hypothetical protein [Arabidopsis thaliana] |        |         |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22113   | Seq. ID | OJ990605_40.9919.C3 |
| Gene No. | 45999   | Strand  | +                   |
| Start    | 2900  | End     | 3478                |
| Name     | OJ990605_40.9919.C3.o1.tm                                     | Method  | TBLASTX:Maize       |
| Start    | 861   | End     | 1067                |
| GI       | none  | Score   | 120                 |
| Exons    | 861..956, 861..944, 869..955, 957..1067, 972..1022, 980..1054 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22113  | Seq. ID | OJ990605_40.9919.C3 |
| Gene No.    | 45999  | Strand  | +                   |
| Start       | 2900   | End     | 3478                |
| Name        | OJ990605_40.9919.C3.o1.gp  | Method  | AAT/GAP             |
| Start       | 2900   | End     | 3145                |
| GI          | 17023_1.R1084  | Score   | 409                 |
| Exons       | 2900..3145   |         |                     |
| GI Descrip. | '4508073/gb AAD21417.1  1.0e-15 (AC005882) 43220 [Arabidopsis thaliana]' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22113                                       | Seq. ID | OJ990605_40.9919.C3 |
| Gene No.    | 45999                                       | Strand  | +                   |
| Start       | 2900  | End     | 3478                |
| Name        | OJ990605_40.9919.C3.o2.np                   | Method  | AAT/NAP             |
| Start       | 2959  | End     | 3478                |
| GI          | 2239260                                     | Score   | 85                  |
| Exons       | 2959..3145, 3440..3478                      |         |                     |
| GI Descrip. | (Y13734) cinnamoyl CoA reductase [Zea mays] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22114  | Seq. ID | OJ990605_40.9919.C4 |
| Gene No.    | 46000  | Strand  | +                   |
| Start       | 532  | End     | 7562                |
| Name        | OJ990605_40.9919.C4.o1.np                          | Method  | AAT/NAP             |
| Start       | 532  | End     | 1481                |
| GI          | 6689826  | Score   | 239                 |
| Exons       | 532..692, 994..1228, 1328..1481                    |         |                     |
| GI Descrip. | (AF092912) DFR-like protein [Arabidopsis thaliana] |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22114   | Seq. ID | OJ990605_40.9919.C4 |
| Gene No. | 46000   | Strand  | +                   |
| Start    | 532   | End     | 7562                |
| Name     | OJ990605_40.9919.C4.o1.gs   | Method  | GENSCAN             |
| Start    | 596   | End     | 6308                |
| GI       | none  | Score   | .83                 |
| Exons    | 596..692, 994..1231, 1328..1441, 2123..2247, 4215..4400, 4842..5008, 5185..5388, 5517..5676, 5833..6046, 6161..6308 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22114                     | Seq. ID | OJ990605_40.9919.C4 |
| Gene No. | 46000                     | Strand  | +                   |
| Start    | 532                       | End     | 7562                |
| Name     | OJ990605_40.9919.C4.o2.np | Method  | AAT/NAP             |
| Start    | 4283                      | End     | 7562                |

GI 5732928 Score 430  
 Exons 4283..4400, 4842..5008, 5185..5388, 5517..5688, 5863..6036, 6154..6274, 7521..7562  
 GI Descrip. (AF169801) dihydroflavonol-4-reductase [Lilium hybrid cultivar VII cv. 'Acapulco']

Seq. No. 22114 Seq. ID OJ990605\_40.9919.C4  
 Gene No. 46000 Strand +  
 Start 532 End 7562  
 Name OJ990605\_40.9919.C4.o1.gp Method AAT/GAP  
 Start 5939 End 6297  
 GI 2797550 Score 444  
 Exons 5939..6046, 6161..6297

Seq. No. 22114 Seq. ID OJ990605\_40.9919.C4  
 Gene No. 46001 Strand -  
 Start 7144 End 7451  
 Name OJ990605\_40.9919.C4.o1.ts Method TBLASTX:Soybean  
 Start 1026 End 6239  
 GI none Score 80  
 Exons 1026..1091, 1140..1229, 1329..1406, 5874..6047, 5876..6043, 6162..6239, 6164..6238

Seq. No. 22114 Seq. ID OJ990605\_40.9919.C4  
 Gene No. 46001 Strand -  
 Start 7144 End 7451  
 Name OJ990605\_40.9919.C4.o2.tm Method TBLASTX:Maize  
 Start 1184 End 6302  
 GI none Score 56  
 Exons 1184..1231, 1185..1229, 1187..1231, 1201..1236, 1326..1463, 1342..1461, 1346..1468, 1347..1469, 6177..6290, 6179..6301, 6180..6302

Seq. No. 22114 Seq. ID OJ990605\_40.9919.C4  
 Gene No. 46001 Strand -  
 Start 7144 End 7451  
 Name OJ990605\_40.9919.C4.o1.tm Method TBLASTX:Maize  
 Start 4294 End 5262  
 GI none Score 165  
 Exons 4294..4407, 4295..4408, 4295..4408, 4820..5008, 4825..5010, 4841..5008, 4842..5009, 5182..5262, 5187..5261

Seq. No. 22114 Seq. ID OJ990605\_40.9919.C4  
 Gene No. 46001 Strand -  
 Start 7144 End 7451  
 Name OJ990605\_40.9919.C4.o1.tw Method TBLASTX:Wheat  
 Start 4312 End 5300  
 GI none Score 126  
 Exons 4312..4404, 4313..4405, 4841..5005, 4841..4990, 5151..5189, 5182..5295, 5182..5295, 5193..5300

Seq. No. 22114 Seq. ID OJ990605\_40.9919.C4  
 Gene No. 46001 Strand -  
 Start 7144 End 7451  
 Name OJ990605\_40.9919.C4.o2.gs Method GENSCAN  
 Start 7144 End 7451  
 GI none Score .83

Exons 7144..7205, 7238..7451

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46002  | Strand  | +                   |
| Start       | 1  | End     | 142                 |
| Name        | OJ990605_40.9919.C5.o1.np                      | Method  | AAT/NAP             |
| Start       | 1  | End     | 142                 |
| GI          | 5042454  | Score   | 72                  |
| Exons       | 1..142   |         |                     |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22115   | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46003   | Strand  | +                   |
| Start    | 195   | End     | 6529                |
| Name     | OJ990605_40.9919.C5.o1.gs                               | Method  | GENSCAN             |
| Start    | 195   | End     | 6529                |
| GI       | none  | Score   | .58                 |
| Exons    | 195..299, 356..2722, 2801..2983, 3002..6073, 6083..6529 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22115   | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46003   | Strand  | +                   |
| Start       | 195   | End     | 6529                |
| Name        | OJ990605_40.9919.C5.o2.np   | Method  | AAT/NAP             |
| Start       | 879   | End     | 6526                |
| GI          | 6498441   | Score   | 6905                |
| Exons       | 879..1943, 2274..2737, 2801..3174, 3358..3492, 3667..4093, 4286..4582, 4754..6151, 6245..6526   |         |                     |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115                                    | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46004                                    | Strand  | +                   |
| Start    | 14779                                    | End     | 16356               |
| Name     | OJ990605_40.9919.C5.o3.gs                | Method  | GENSCAN             |
| Start    | 14779                                    | End     | 16356               |
| GI       | none                                     | Score   | .77                 |
| Exons    | 14779..14835, 15089..15263, 16241..16356 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46005  | Strand  | +                   |
| Start    | 18466  | End     | 27146               |
| Name     | OJ990605_40.9919.C5.o4.gs  | Method  | GENSCAN             |
| Start    | 18466  | End     | 27126               |
| GI       | none   | Score   | .73                 |
| Exons    | 18466..18586, 19763..19929, 20114..20314, 21017..21176, 21274..21487, 21705..21828, 22005..22195, 23659..23750, 23872..24351, 25887..26426, 26432..26738, 26808..27126 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22115   | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46005   | Strand  | +                   |
| Start       | 18466   | End     | 27146               |
| Name        | OJ990605_40.9919.C5.o2.gp                                     | Method  | AAT/GAP             |
| Start       | 23907   | End     | 24040               |
| GI          | uC-osf1M202039g09b1   | Score   | 176                 |
| Exons       | 23907..24040  |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 6.0e-28 Oryza sativa genomic |         |                     |

DNA, chromosome 1, clone:P0711E10'

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22115   | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46005   | Strand  | +                   |
| Start       | 18466   | End     | 27146               |
| Name        | OJ990605_40.9919.C5.o4.np   | Method  | AAT/NAP             |
| Start       | 23971   | End     | 27146               |
| GI          | 3152576   | Score   | 614                 |
| Exons       | 23971..24351, 25887..26744, 26808..27146  |         |                     |
| GI Descrip. | (AC002986) Similar to liver-specific transport protein gb L27651 from Rattus norvegicus. [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22115                     | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46005                     | Strand  | +                   |
| Start    | 18466                     | End     | 27146               |
| Name     | OJ990605_40.9919.C5.o3.gp | Method  | AAT/GAP             |
| Start    | 26362                     | End     | 26682               |
| GI       | 568937                    | Score   | 628                 |
| Exons    | 26362..26682              |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46006  | Strand  | +                   |
| Start    | 28085  | End     | 30672               |
| Name     | OJ990605_40.9919.C5.o5.gs                              | Method  | GENSCAN             |
| Start    | 28085  | End     | 30672               |
| GI       | none   | Score   | .69                 |
| Exons    | 28085..28157, 28486..28730, 30436..30466, 30590..30672 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46007  | Strand  | +                   |
| Start       | 32193  | End     | 33823               |
| Name        | OJ990605_40.9919.C5.o5.gp  | Method  | AAT/GAP             |
| Start       | 32154  | End     | 33243               |
| GI          | 71813_1.R1084  | Score   | 1010                |
| Exons       | 32154..32352, 32471..32571, 32945..33243   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 6.0e-28 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46007  | Strand  | +                   |
| Start       | 32193  | End     | 33823               |
| Name        | OJ990605_40.9919.C5.o5.np  | Method  | AAT/NAP             |
| Start       | 32184  | End     | 33649               |
| GI          | 4262149  | Score   | 788                 |
| Exons       | 32184..32352, 32471..32571, 32945..33196, 33272..33454, 33488..33649       |         |                     |
| GI Descrip. | (AC005275) putative xyloglucan endotransglycosylase [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115                                    | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46007                                    | Strand  | +                   |
| Start    | 32193                                    | End     | 33823               |
| Name     | OJ990605_40.9919.C5.o6.gs                | Method  | GENSCAN             |
| Start    | 32193                                    | End     | 33643               |
| GI       | none                                     | Score   | .62                 |
| Exons    | 32193..32352, 32471..32575, 32928..33643 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22115   | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46007   | Strand  | +                   |
| Start       | 32193   | End     | 33823               |
| Name        | OJ990605_40.9919.C5.o6.gp   | Method  | AAT/GAP             |
| Start       | 33356   | End     | 33823               |
| GI          | 76282_1.R1084   | Score   | 848                 |
| Exons       | 33356..33823  |         |                     |
| GI Descrip. | '4262149/gb AAD14449  7.0e-17 (AC005275) putative xyloglucan endotransglycosylase [Arabidopsis thaliana]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46008  | Strand  | +                   |
| Start    | 34739  | End     | 36188               |
| Name     | OJ990605_40.9919.C5.o7.gs                              | Method  | GENSCAN             |
| Start    | 34739  | End     | 36188               |
| GI       | none   | Score   | .78                 |
| Exons    | 34739..34759, 35327..35579, 36047..36123, 36138..36188 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22115   | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46009   | Strand  | -                   |
| Start    | 7169  | End     | 13600               |
| Name     | OJ990605_40.9919.C5.o2.gs                           | Method  | GENSCAN             |
| Start    | 7169  | End     | 13600               |
| GI       | none  | Score   | .52                 |
| Exons    | 7169..9071, 9169..10234, 12288..13074, 13547..13600 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46009  | Strand  | -                   |
| Start       | 7169   | End     | 13600               |
| Name        | OJ990605_40.9919.C5.o3.np                      | Method  | AAT/NAP             |
| Start       | 7172   | End     | 13600               |
| GI          | 5803259  | Score   | 4754                |
| Exons       | 7172..9071, 9169..10276, 13447..13600          |         |                     |
| GI Descrip. | (AP000399) hypothetical protein [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46009  | Strand  | -                   |
| Start       | 7169   | End     | 13600               |
| Name        | OJ990605_40.9919.C5.o1.gp  | Method  | AAT/GAP             |
| Start       | 10991  | End     | 11374               |
| GI          | uC-osflcyp033a04b1   | Score   | 669                 |
| Exons       | 10991..11374   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46010  | Strand  | -                   |
| Start       | 36528  | End     | 44222               |
| Name        | OJ990605_40.9919.C5.o6.np                          | Method  | AAT/NAP             |
| Start       | 36528  | End     | 38641               |
| GI          | 3269281  | Score   | 561                 |
| Exons       | 36528..36591, 37758..38641                         |         |                     |
| GI Descrip. | (AL030978) putative protein [Arabidopsis thaliana] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22115 | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46010 | Strand  | -                   |
| Start    | 36528 | End     | 44222               |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Name        | OJ990605_40.9919.C5.o8.gs  | Method  | GENSCAN             |
| Start       | 37794  | End     | 44222               |
| GI          | none   | Score   | .76                 |
| Exons       | 37794..38304, 38409..38602, 39250..39293, 39660..39757,<br>40638..40681, 41028..41147, 41277..41645, 41901..42051,<br>42892..43033, 44054..44222 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46010  | Strand  | -                   |
| Start       | 36528  | End     | 44222               |
| Name        | OJ990605_40.9919.C5.o7.gp  | Method  | AAT/GAP             |
| Start       | 39261  | End     | 39461               |
| GI          | 3106943  | Score   | 299                 |
| Exons       | 39261..39461   |         |                     |
| GI Descrip. | 1019378/dbj D17785 RICNH4621 1.0e-104 Rice DNA for U3 small<br>nuclear RNA, partial sequence   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46010  | Strand  | -                   |
| Start       | 36528  | End     | 44222               |
| Name        | OJ990605_40.9919.C5.o8.gp  | Method  | AAT/GAP             |
| Start       | 40649  | End     | 40848               |
| GI          | 3106943  | Score   | 374                 |
| Exons       | 40649..40848   |         |                     |
| GI Descrip. | 1019378/dbj D17785 RICNH4621 1.0e-104 Rice DNA for U3 small<br>nuclear RNA, partial sequence   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46011  | Strand  | -                   |
| Start       | 45782  | End     | 47652               |
| Name        | OJ990605_40.9919.C5.o6.tw  | Method  | TBLASTX:Wheat       |
| Start       | 1028   | End     | 1420                |
| GI          | none   | Score   | 58                  |
| Exons       | 1028..1075, 1082..1180, 1087..1179, 1147..1386, 1163..1420   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46011  | Strand  | -                   |
| Start       | 45782  | End     | 47652               |
| Name        | OJ990605_40.9919.C5.o9.tm  | Method  | TBLASTX:Maize       |
| Start       | 1033   | End     | 1318                |
| GI          | none   | Score   | 196                 |
| Exons       | 1033..1317, 1070..1318   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46011  | Strand  | -                   |
| Start       | 45782  | End     | 47652               |
| Name        | OJ990605_40.9919.C5.o3.tw  | Method  | TBLASTX:Wheat       |
| Start       | 2158   | End     | 2617                |
| GI          | none   | Score   | 407                 |
| Exons       | 2158..2295, 2159..2617, 2353..2613   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No.    | 46011  | Strand  | -                   |
| Start       | 45782  | End     | 47652               |
| Name        | OJ990605_40.9919.C5.o1.tw  | Method  | TBLASTX:Wheat       |
| Start       | 2808   | End     | 3271                |
| GI          | none   | Score   | 202                 |

Exons 2808..3251, 2809..3264, 2810..3271, 2810..3265

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22115                     | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                     | Strand  | -                   |
| Start    | 45782                     | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o7.ts | Method  | TBLASTX:Soybean     |
| Start    | 2849                      | End     | 3214                |
| GI       | none                      | Score   | 111                 |
| Exons    | 2849..3073, 3080..3214    |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22115                              | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                              | Strand  | -                   |
| Start    | 45782                              | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o3.tm          | Method  | TBLASTX:Maize       |
| Start    | 2939                               | End     | 3295                |
| GI       | none                               | Score   | 383                 |
| Exons    | 2939..3295, 2974..3285, 2990..3295 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22115                     | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                     | Strand  | -                   |
| Start    | 45782                     | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o4.tm | Method  | TBLASTX:Maize       |
| Start    | 3322                      | End     | 3706                |
| GI       | none                      | Score   | 357                 |
| Exons    | 3322..3687, 3323..3706    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22115                     | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                     | Strand  | -                   |
| Start    | 45782                     | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o2.tw | Method  | TBLASTX:Wheat       |
| Start    | 3379                      | End     | 3799                |
| GI       | none                      | Score   | 491                 |
| Exons    | 3379..3792, 3380..3799    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22115                     | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                     | Strand  | -                   |
| Start    | 45782                     | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o6.ts | Method  | TBLASTX:Soybean     |
| Start    | 3458                      | End     | 3829                |
| GI       | none                      | Score   | 277                 |
| Exons    | 3458..3829, 3475..3618    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011  | Strand  | -                   |
| Start    | 45782  | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o5.tw  | Method  | TBLASTX:Wheat       |
| Start    | 4326   | End     | 4888                |
| GI       | none   | Score   | 233                 |
| Exons    | 4326..4346, 4454..4678, 4469..4678, 4519..4704, 4739..4888, 4748..4885, 4750..4887 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22115                      | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                      | Strand  | -                   |
| Start    | 45782                      | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o11.tw | Method  | TBLASTX:Wheat       |
| Start    | 4891                       | End     | 5203                |
| GI       | none                       | Score   | 184                 |



Exons 4891..4989, 4943..5203

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22115                     | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                     | Strand  | -                   |
| Start    | 45782                     | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o5.tm | Method  | TBLASTX:Maize       |
| Start    | 5396                      | End     | 5719                |
| GI       | none                      | Score   | 354                 |
| Exons    | 5396..5719, 5425..5706    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011  | Strand  | -                   |
| Start    | 45782  | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o4.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 5533   | End     | 5914                |
| GI       | none   | Score   | 375                 |
| Exons    | 5533..5589, 5534..5914, 5534..5875, 5635..5883 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011  | Strand  | -                   |
| Start    | 45782  | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o8.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 5915   | End     | 6517                |
| GI       | none   | Score   | 253                 |
| Exons    | 5915..6217, 5920..6198, 6391..6513, 6392..6517 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011  | Strand  | -                   |
| Start    | 45782  | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o8.tm  | Method  | TBLASTX:Maize       |
| Start    | 18453  | End     | 20191               |
| GI       | none   | Score   | 164                 |
| Exons    | 18453..18584, 18478..18585, 19693..19929, 19741..19929, 19746..19931, 19763..19930, 20087..20191 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011  | Strand  | -                   |
| Start    | 45782  | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o10.tw   | Method  | TBLASTX:Wheat       |
| Start    | 18498  | End     | 20227               |
| GI       | none   | Score   | 125                 |
| Exons    | 18498..18584, 18499..18585, 18516..18587, 19762..19938, 19762..19911, 20111..20224, 20111..20227 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22115                      | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                      | Strand  | -                   |
| Start    | 45782                      | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o9.tw  | Method  | TBLASTX:Wheat       |
| Start    | 24020                      | End     | 24172               |
| GI       | none                       | Score   | 216                 |
| Exons    | 24020..24172, 24021..24167 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22115                     | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                     | Strand  | -                   |
| Start    | 45782                     | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o4.ts | Method  | TBLASTX:Soybean     |
| Start    | 24021                     | End     | 24353               |

GI 4397580 Score 185  
 Exons 24021..24161, 24029..24172, 24237..24353, 24254..24352  
 GI Descrip. 3152576 6.0e-14 (AC002986) Similar to liver-specific transport protein gb\_L27651 from Rattus norvegicus. [Arabidopsis thaliana]

Seq. No. 22115 Seq. ID OJ990605\_40.9919.C5  
 Gene No. 46011 Strand -  
 Start 45782 End 47652  
 Name OJ990605\_40.9919.C5.o2.tc Method TBLASTX:Cress  
 Start 24258 End 26217  
 GI none Score 72  
 Exons 24258..24353, 25879..26217, 25880..26140

Seq. No. 22115 Seq. ID OJ990605\_40.9919.C5  
 Gene No. 46011 Strand -  
 Start 45782 End 47652  
 Name OJ990605\_40.9919.C5.o2.ts Method TBLASTX:Soybean  
 Start 25907 End 26383  
 GI none Score 322  
 Exons 25907..26185, 25909..26169, 26186..26383, 26201..26362

Seq. No. 22115 Seq. ID OJ990605\_40.9919.C5  
 Gene No. 46011 Strand -  
 Start 45782 End 47652  
 Name OJ990605\_40.9919.C5.o5.ts Method TBLASTX:Soybean  
 Start 26458 End 26853  
 GI none Score 269  
 Exons 26458..26739, 26806..26853

Seq. No. 22115 Seq. ID OJ990605\_40.9919.C5  
 Gene No. 46011 Strand -  
 Start 45782 End 47652  
 Name OJ990605\_40.9919.C5.o6.tm Method TBLASTX:Maize  
 Start 32261 End 33118  
 GI none Score 158  
 Exons 32261..32311, 32262..32354, 32428..32577, 32469..32570, 32470..32571, 32933..33079, 32945..33118, 32947..33117

Seq. No. 22115 Seq. ID OJ990605\_40.9919.C5  
 Gene No. 46011 Strand -  
 Start 45782 End 47652  
 Name OJ990605\_40.9919.C5.o1.tc Method TBLASTX:Cress  
 Start 32262 End 33631  
 GI none Score 93  
 Exons 32262..32354, 32434..32577, 32469..32570, 32945..33178, 32947..33177, 33298..33384, 33299..33415, 33494..33631

Seq. No. 22115 Seq. ID OJ990605\_40.9919.C5  
 Gene No. 46011 Strand -  
 Start 45782 End 47652  
 Name OJ990605\_40.9919.C5.o1.ts Method TBLASTX:Soybean  
 Start 32262 End 33631  
 GI none Score 115  
 Exons 32262..32354, 32467..32577, 32469..32570, 32945..33178, 32947..33180, 33298..33387, 33299..33415, 33493..33630, 33494..33631

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011  | Strand  | -                   |
| Start    | 45782  | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 33119  | End     | 33701               |
| GI       | none   | Score   | 103                 |
| Exons    | 33119..33178, 33203..33217, 33298..33639, 33299..33643, 33681..33701 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115                                    | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                                    | Strand  | -                   |
| Start    | 45782                                    | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o7.tm                | Method  | TBLASTX:Maize       |
| Start    | 37830                                    | End     | 38165               |
| GI       | none                                     | Score   | 185                 |
| Exons    | 37830..37871, 37872..38165, 37872..38165 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011  | Strand  | -                   |
| Start    | 45782  | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o3.ts                              | Method  | TBLASTX:Soybean     |
| Start    | 37872  | End     | 38467               |
| GI       | none   | Score   | 122                 |
| Exons    | 37872..38285, 37879..38268, 38330..38467, 38349..38447 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011  | Strand  | -                   |
| Start    | 45782  | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 38173  | End     | 38621               |
| GI       | none   | Score   | 70                  |
| Exons    | 38173..38280, 38175..38330, 38176..38268, 38337..38621, 38340..38615, 38342..38620 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22115  | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011  | Strand  | -                   |
| Start    | 45782  | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o7.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 38232  | End     | 38620               |
| GI       | none   | Score   | 87                  |
| Exons    | 38232..38318, 38342..38488, 38343..38489, 38501..38620 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22115                      | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                      | Strand  | -                   |
| Start    | 45782                      | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o9.gs  | Method  | GENSCAN             |
| Start    | 45782                      | End     | 47652               |
| GI       | none                       | Score   | .62                 |
| Exons    | 45782..45795, 47454..47652 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22115                     | Seq. ID | OJ990605_40.9919.C5 |
| Gene No. | 46011                     | Strand  | -                   |
| Start    | 45782                     | End     | 47652               |
| Name     | OJ990605_40.9919.C5.o7.np | Method  | AAT/NAP             |
| Start    | 45910                     | End     | 46354               |
| GI       | 6069646                   | Score   | 411                 |

Exons 45910..46354  
 GI Descrip. (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi|6907112|dbj|BAA90639.1| (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa]

Seq. No. 22115 Seq. ID OJ990605\_40.9919.C5  
 Gene No. 46011 Strand -  
 Start 45782 End 47652  
 Name OJ990605\_40.9919.C5.o10.tm Method TBLASTX:Maize  
 Start 46020 End 46358  
 GI none Score 91  
 Exons 46020..46163, 46153..46272, 46251..46358

Seq. No. 22116 Seq. ID OJ990605\_40.9919.C6  
 Gene No. 46012 Strand +  
 Start 934 End 1442  
 Name OJ990605\_40.9919.C6.o1.gs Method GENSCAN  
 Start 934 End 1442  
 GI none Score .56  
 Exons 934..939, 1299..1442

Seq. No. 22116 Seq. ID OJ990605\_40.9919.C6  
 Gene No. 46013 Strand +  
 Start 3617 End 11103  
 Name OJ990605\_40.9919.C6.o3.np Method AAT/NAP  
 Start 3617 End 7559  
 GI 4508068 Score 261  
 Exons 3617..3637, 6496..6552, 6743..6808, 6992..7063, 7416..7559  
 GI Descrip. (AC005882) 3063 [Arabidopsis thaliana]

Seq. No. 22116 Seq. ID OJ990605\_40.9919.C6  
 Gene No. 46013 Strand +  
 Start 3617 End 11103  
 Name OJ990605\_40.9919.C6.o3.gs Method GENSCAN  
 Start 5346 End 11103  
 GI none Score .65  
 Exons 5346..5711, 5932..6339, 6448..6552, 6992..7057, 7219..7272, 7416..7558, 8516..8565, 10357..10543, 10782..11103

Seq. No. 22116 Seq. ID OJ990605\_40.9919.C6  
 Gene No. 46014 Strand -  
 Start 1 End 4117  
 Name OJ990605\_40.9919.C6.o1.np Method AAT/NAP  
 Start 1 End 4117  
 GI 6016874 Score 2229  
 Exons 1..42, 1203..1465, 1941..2280, 2398..2577, 2971..3130, 3521..3753, 3818..3955, 4039..4117  
 GI Descrip. (AP000570) ESTs C19143(E10020), D25076(R3116) correspond to a region of the predicted gene.; Similar to putative AC9 transposase. (P03010) [Oryza sativa]

Seq. No. 22116 Seq. ID OJ990605\_40.9919.C6  
 Gene No. 46014 Strand -  
 Start 1 End 4117  
 Name OJ990605\_40.9919.C6.o2.gs Method GENSCAN

|       |  |       |      |
|-------|--|-------|------|
| Start | 1937   | End   | 4117 |
| GI    | none   | Score | .76  |
| Exons | 1937..2397, 2971..3130, 3521..3753, 3818..3955, 4039..4117 |       |      |

  

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22116   | Seq. ID | OJ990605_40.9919.C6 |
| Gene No.    | 46014   | Strand  | -                   |
| Start       | 1   | End     | 4117                |
| Name        | OJ990605_40.9919.C6.o1.gp   | Method  | AAT/GAP             |
| Start       | 2920  | End     | 3428                |
| GI          | uC-osflcyp110c07b1  | Score   | 970                 |
| Exons       | 2920..3428  |         |                     |
| GI Descrip. | '4680178/gb AF111709.1 AF111709 5.0e-81 Oryza sativa subsp. indica Retrosat 1 retrotransposon and Ty3-Gypsy type Retrosat 2 retrotransposon, complete sequences; and unknown genes' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22116                     | Seq. ID | OJ990605_40.9919.C6 |
| Gene No. | 46015                     | Strand  | -                   |
| Start    | 4516                      | End     | 4673                |
| Name     | OJ990605_40.9919.C6.o2.tm | Method  | TBLASTX:Maize       |
| Start    | 2003                      | End     | 2246                |
| GI       | none                      | Score   | 97                  |
| Exons    | 2003..2236, 2088..2246    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22116                     | Seq. ID | OJ990605_40.9919.C6 |
| Gene No. | 46015                     | Strand  | -                   |
| Start    | 4516                      | End     | 4673                |
| Name     | OJ990605_40.9919.C6.o4.tm | Method  | TBLASTX:Maize       |
| Start    | 2358                      | End     | 2710                |
| GI       | none                      | Score   | 131                 |
| Exons    | 2358..2699, 2429..2710    |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22116                              | Seq. ID | OJ990605_40.9919.C6 |
| Gene No. | 46015                              | Strand  | -                   |
| Start    | 4516                               | End     | 4673                |
| Name     | OJ990605_40.9919.C6.o3.tm          | Method  | TBLASTX:Maize       |
| Start    | 2915                               | End     | 3229                |
| GI       | none                               | Score   | 108                 |
| Exons    | 2915..3142, 2916..3134, 3155..3229 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22116  | Seq. ID | OJ990605_40.9919.C6 |
| Gene No. | 46015  | Strand  | -                   |
| Start    | 4516   | End     | 4673                |
| Name     | OJ990605_40.9919.C6.o1.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 3323   | End     | 3769                |
| GI       | none   | Score   | 101                 |
| Exons    | 3323..3361, 3356..3412, 3449..3697, 3489..3698, 3683..3769 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22116  | Seq. ID | OJ990605_40.9919.C6 |
| Gene No.    | 46015  | Strand  | -                   |
| Start       | 4516   | End     | 4673                |
| Name        | OJ990605_40.9919.C6.o2.np                      | Method  | AAT/NAP             |
| Start       | 4516   | End     | 4673                |
| GI          | 6907084  | Score   | 150                 |
| Exons       | 4516..4673                                     |         |                     |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22117 | Seq. ID | OJ990605_40.9919.C7 |
|----------|-------|---------|---------------------|

|          |  |        |         |
|----------|--|--------|---------|
| Gene No. | 46016                                  | Strand | +       |
| Start    | 9621                                   | End    | 11006   |
| Name     | OJ990605_40.9919.C7.o2.gs              | Method | GENSCAN |
| Start    | 9621                                   | End    | 11006   |
| GI       | none                                   | Score  | .94     |
| Exons    | 9621..9679, 10385..10555, 10925..11006 |        |         |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22117   | Seq. ID | OJ990605_40.9919.C7 |
| Gene No.    | 46017   | Strand  | -                   |
| Start       | 1127  | End     | 9355                |
| Name        | OJ990605_40.9919.C7.o1.np   | Method  | AAT/NAP             |
| Start       | 912   | End     | 9355                |
| GI          | 6686398   | Score   | 2443                |
| Exons       | 912..1211, 1293..1443, 1536..1773, 1877..2087, 2200..2390, 2442..2579, 3275..4464, 6126..6430, 6517..6667, 6759..6996, 7097..7307, 7392..7520, 7772..7959, 8083..9355 |         |                     |
| GI Descrip. | (AC007234) F1E22.15 [Arabidopsis thaliana]  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22117  | Seq. ID | OJ990605_40.9919.C7 |
| Gene No. | 46017  | Strand  | -                   |
| Start    | 1127   | End     | 9355                |
| Name     | OJ990605_40.9919.C7.o1.gs  | Method  | GENSCAN             |
| Start    | 1127   | End     | 9328                |
| GI       | none   | Score   | .74                 |
| Exons    | 1127..1211, 1536..1686, 1877..2087, 2200..2381, 3311..4542, 4945..5306, 5376..5801, 6158..6430, 6580..6667, 6759..6942, 7097..7307, 7392..7573, 7651..7752, 8074..9328 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22117   | Seq. ID | OJ990605_40.9919.C7 |
| Gene No. | 46018   | Strand  | -                   |
| Start    | 11236   | End     | 12562               |
| Name     | OJ990605_40.9919.C7.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 881   | End     | 11814               |
| GI       | none  | Score   | 246                 |
| Exons    | 881..1207, 891..1223, 894..1244, 1291..1449, 1293..1448, 1293..1451, 1294..1449, 1325..1450, 6013..6066, 6029..6064, 6122..6445, 6122..6442, 6505..6681, 6513..6680, 6524..6691, 11236..11277, 11296..11535, 11324..11539, 11631..11666, 11652..11807, 11658..11813, 11671..11814 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22117   | Seq. ID | OJ990605_40.9919.C7 |
| Gene No. | 46018   | Strand  | -                   |
| Start    | 11236   | End     | 12562               |
| Name     | OJ990605_40.9919.C7.o1.tc   | Method  | TBLASTX:Cress       |
| Start    | 984   | End     | 12545               |
| GI       | none  | Score   | 86                  |
| Exons    | 984..1202, 1000..1137, 1336..1437, 1347..1439, 1538..1780, 1539..1754, 1878..2087, 1948..2037, 2200..2340, 6233..6460, 6237..6356, 6559..6663, 6560..6664, 6762..6974, 6782..7003, 7092..7238, 7116..7310, 7180..7308, 7392..7532, 7393..7473, 11278..11535, 11342..11464, 11661..11780, 11677..11781, 11692..11784, 11878..12057, 11879..12058, 11882..12181, 12333..12545, 12334..12486 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22117 | Seq. ID | OJ990605_40.9919.C7 |
| Gene No. | 46018 | Strand  | -                   |
| Start    | 11236 | End     | 12562               |

|       |  |        |                 |
|-------|--|--------|-----------------|
| Name  | OJ990605_40.9919.C7.o1.ts  | Method | TBLASTX:Soybean |
| Start | 985  | End    | 12545           |
| GI    | none   | Score  | 115             |
| Exons | 985..1200, 990..1223, 1032..1223, 1339..1443, 1347..1469, 1348..1443, 1538..1789, 1539..1775, 1562..1789, 1869..1901, 1905..2087, 1906..2028, 1911..2090, 2200..2232, 6176..6442, 6237..6440, 6557..6664, 6560..6667, 6565..6666, 6762..7013, 6788..7018, 7125..7310, 7126..7308, 7131..7346, 7392..7424, 11236..11535, 11324..11539, 11665..11784, 11680..11781, 11682..11783, 11880..12092, 11882..12127, 11882..12124, 12321..12356, 12350..12484, 12360..12545, 12361..12483, 12368..12484, 12390..12515 |        |                 |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22117  | Seq. ID | OJ990605_40.9919.C7 |
| Gene No. | 46018  | Strand  | -                   |
| Start    | 11236  | End     | 12562               |
| Name     | OJ990605_40.9919.C7.o3.tw                                      | Method  | TBLASTX:Wheat       |
| Start    | 1006   | End     | 11535               |
| GI       | none   | Score   | 68                  |
| Exons    | 1006..1134, 1008..1211, 6233..6388, 11330..11458, 11332..11535 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22117  | Seq. ID | OJ990605_40.9919.C7 |
| Gene No. | 46018  | Strand  | -                   |
| Start    | 11236  | End     | 12562               |
| Name     | OJ990605_40.9919.C7.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 1293   | End     | 12055               |
| GI       | none   | Score   | 57                  |
| Exons    | 1293..1439, 1293..1442, 1312..1443, 1538..1708, 1538..1711, 1539..1709, 6389..6448, 6517..6666, 6545..6667, 6761..6931, 6762..6932, 6782..6934, 11661..11783, 11677..11784, 11882..12055, 11883..12053 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22117  | Seq. ID | OJ990605_40.9919.C7 |
| Gene No. | 46018  | Strand  | -                   |
| Start    | 11236  | End     | 12562               |
| Name     | OJ990605_40.9919.C7.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 1536   | End     | 12545               |
| GI       | none   | Score   | 166                 |
| Exons    | 1536..1754, 1537..1656, 1538..1774, 1878..2087, 1879..2037, 6759..6974, 6782..6997, 7099..7308, 7116..7310, 11882..12136, 11883..12095, 11885..12127, 12333..12545, 12349..12486 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22117  | Seq. ID | OJ990605_40.9919.C7 |
| Gene No. | 46018  | Strand  | -                   |
| Start    | 11236  | End     | 12562               |
| Name     | OJ990605_40.9919.C7.o2.tw  | Method  | TBLASTX:Wheat       |
| Start    | 1712   | End     | 12545               |
| GI       | none   | Score   | 126                 |
| Exons    | 1712..1780, 1870..2103, 1878..2087, 6935..7003, 6936..7004, 7090..7308, 7116..7310, 12056..12136, 12325..12486, 12327..12545 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22117                     | Seq. ID | OJ990605_40.9919.C7 |
| Gene No. | 46018                     | Strand  | -                   |
| Start    | 11236                     | End     | 12562               |
| Name     | OJ990605_40.9919.C7.o5.tm | Method  | TBLASTX:Maize       |
| Start    | 2200                      | End     | 7742                |
| GI       | none                      | Score   | 131                 |

Exons 2200..2382, 2200..2382, 2467..2583, 7381..7497, 7392..7574, 7395..7574, 7646..7741, 7647..7742

Seq. No. 22117 Seq. ID OJ990605\_40.9919.C7  
 Gene No. 46018 Strand -  
 Start 11236 End 12562  
 Name OJ990605\_40.9919.C7.o4.tm Method TBLASTX:Maize  
 Start 3324 End 8321  
 GI none Score 51  
 Exons 3324..3377, 3324..3404, 3334..3393, 3366..3521, 3370..3522, 3375..3521, 3392..3526, 3394..3522, 8115..8162, 8119..8187, 8120..8173, 8169..8288, 8170..8286, 8174..8320, 8175..8321

Seq. No. 22117 Seq. ID OJ990605\_40.9919.C7  
 Gene No. 46018 Strand -  
 Start 11236 End 12562  
 Name OJ990605\_40.9919.C7.o2.tc Method TBLASTX:Cress  
 Start 3588 End 9256  
 GI none Score 65  
 Exons 3588..3635, 3633..3773, 3889..3999, 3891..4022, 4056..4148, 4057..4104, 4194..4424, 4273..4404, 8711..8812, 8712..8795, 8858..8968, 8858..8947, 8969..9115, 9033..9116, 9107..9256

Seq. No. 22117 Seq. ID OJ990605\_40.9919.C7  
 Gene No. 46018 Strand -  
 Start 11236 End 12562  
 Name OJ990605\_40.9919.C7.o3.tm Method TBLASTX:Maize  
 Start 3879 End 9135  
 GI none Score 41  
 Exons 3879..3971, 3909..3956, 3963..4361, 3985..4353, 8702..8767, 8706..8765, 8750..8998, 8772..8939, 8792..8977, 8900..8965, 8948..9124, 9000..9080, 9045..9128, 9067..9105, 9069..9122, 9070..9135

Seq. No. 22117 Seq. ID OJ990605\_40.9919.C7  
 Gene No. 46018 Strand -  
 Start 11236 End 12562  
 Name OJ990605\_40.9919.C7.o2.ts Method TBLASTX:Soybean  
 Start 3975 End 9268  
 GI none Score 88  
 Exons 3975..4109, 3979..4110, 4104..4211, 4128..4388, 4284..4358, 4368..4433, 8771..8905, 8775..8903, 8978..9058, 9017..9118, 9079..9120, 9158..9268

Seq. No. 22117 Seq. ID OJ990605\_40.9919.C7  
 Gene No. 46018 Strand -  
 Start 11236 End 12562  
 Name OJ990605\_40.9919.C7.o2.np Method AAT/NAP  
 Start 11218 End 12562  
 GI 2181190 Score 760  
 Exons 11218..11535, 11631..11784, 11880..12117, 12332..12562  
 GI Descrip. (Y12531) serine/threonine kinase [Brassica oleracea]

Seq. No. 22117 Seq. ID OJ990605\_40.9919.C7  
 Gene No. 46018 Strand -  
 Start 11236 End 12562  
 Name OJ990605\_40.9919.C7.o3.gs Method GENSCAN



|       |  |       |       |
|-------|--|-------|-------|
| Start | 11236  | End   | 12524 |
| GI    | none   | Score | .9    |
| Exons | 11236..11418, 11631..11784, 11880..12117, 12332..12524 |       |       |

  

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22118  | Seq. ID | OJ990605_40.9919.C8 |
| Gene No.    | 46019  | Strand  | -                   |
| Start       | 1230   | End     | 2016                |
| Name        | OJ990605_40.9919.C8.o1.np  | Method  | AAT/NAP             |
| Start       | 1230   | End     | 2016                |
| GI          | 5295955  | Score   | 247                 |
| Exons       | 1230..2016   |         |                     |
| GI Descrip. | (AB026295) Similar to Epstein-Barr virus (EBV) genome.(V01555)<br>[Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22119  | Seq. ID | OJ990605_40.9919.C9 |
| Gene No.    | 46020  | Strand  | -                   |
| Start       | 1  | End     | 2066                |
| Name        | OJ990605_40.9919.C9.o1.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 1612                |
| GI          | 5295955  | Score   | 215                 |
| Exons       | 1..218, 900..1013, 1552..1612  |         |                     |
| GI Descrip. | (AB026295) Similar to Epstein-Barr virus (EBV) genome.(V01555)<br>[Oryza sativa] |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22119                                       | Seq. ID | OJ990605_40.9919.C9 |
| Gene No. | 46020                                       | Strand  | -                   |
| Start    | 1   | End     | 2066                |
| Name     | OJ990605_40.9919.C9.o1.gs                   | Method  | GENSCAN             |
| Start    | 394   | End     | 2066                |
| GI       | none  | Score   | .89                 |
| Exons    | 394..475, 959..1077, 1484..1620, 1943..2066 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22119                     | Seq. ID | OJ990605_40.9919.C9 |
| Gene No. | 46021                     | Strand  | -                   |
| Start    | 3066                      | End     | 4199                |
| Name     | OJ990605_40.9919.C9.o2.gs | Method  | GENSCAN             |
| Start    | 3066                      | End     | 4199                |
| GI       | none                      | Score   | .99                 |
| Exons    | 3066..4199                |         |                     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22120                      | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022                      | Strand  | +                    |
| Start    | 1195                       | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o1.gs | Method  | GENSCAN              |
| Start    | 1195                       | End     | 5745                 |
| GI       | none                       | Score   | .94                  |
| Exons    | 1195..5745                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22120   | Seq. ID | OJ990605_40.9919.C10 |
| Gene No.    | 46022   | Strand  | +                    |
| Start       | 1195  | End     | 5745                 |
| Name        | OJ990605_40.9919.C10.o1.np                          | Method  | AAT/NAP              |
| Start       | 1195  | End     | 5742                 |
| GI          | 4680179   | Score   | 6764                 |
| Exons       | 1195..5742  |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                      |

Seq. No. 22120  
 Gene No. 46022  
 Start 1195  
 Name OJ990605\_40.9919.C10.o7.tw  
 Start 1408  
 GI none  
 Exons 1408..1788, 1428..1787

Seq. ID OJ990605\_40.9919.C10  
 Strand +  
 End 5745  
 Method TBLASTX:Wheat  
 End 1788  
 Score 304

Seq. No. 22120  
 Gene No. 46022  
 Start 1195  
 Name OJ990605\_40.9919.C10.o6.tm  
 Start 1669  
 GI none  
 Exons 1669..2001, 1692..1856

Seq. ID OJ990605\_40.9919.C10  
 Strand +  
 End 5745  
 Method TBLASTX:Maize  
 End 2001  
 Score 226

Seq. No. 22120  
 Gene No. 46022  
 Start 1195  
 Name OJ990605\_40.9919.C10.o8.tw  
 Start 2329  
 GI none  
 Exons 2329..2553, 2343..2495, 2557..2730, 2590..2649, 2631..2699

Seq. ID OJ990605\_40.9919.C10  
 Strand +  
 End 5745  
 Method TBLASTX:Wheat  
 End 2730  
 Score 150

Seq. No. 22120  
 Gene No. 46022  
 Start 1195  
 Name OJ990605\_40.9919.C10.o8.tm  
 Start 2367  
 GI none  
 Exons 2367..2468, 2368..2643

Seq. ID OJ990605\_40.9919.C10  
 Strand +  
 End 5745  
 Method TBLASTX:Maize  
 End 2643  
 Score 195

Seq. No. 22120  
 Gene No. 46022  
 Start 1195  
 Name OJ990605\_40.9919.C10.o4.tw  
 Start 2905  
 GI none  
 Exons 2905..3387, 3009..3344

Seq. ID OJ990605\_40.9919.C10  
 Strand +  
 End 5745  
 Method TBLASTX:Wheat  
 End 3387  
 Score 546

Seq. No. 22120  
 Gene No. 46022  
 Start 1195  
 Name OJ990605\_40.9919.C10.o5.tm  
 Start 2917  
 GI none  
 Exons 2917..3204, 3015..3206

Seq. ID OJ990605\_40.9919.C10  
 Strand +  
 End 5745  
 Method TBLASTX:Maize  
 End 3206  
 Score 322

Seq. No. 22120  
 Gene No. 46022  
 Start 1195  
 Name OJ990605\_40.9919.C10.o4.ts  
 Start 2941  
 GI none  
 Exons 2941..3255

Seq. ID OJ990605\_40.9919.C10  
 Strand +  
 End 5745  
 Method TBLASTX:Soybean  
 End 3255  
 Score 183

Seq. No. 22120

Seq. ID OJ990605\_40.9919.C10

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46022  | Strand | +             |
| Start    | 1195   | End    | 5745          |
| Name     | OJ990605_40.9919.C10.o3.tm                     | Method | TBLASTX:Maize |
| Start    | 3274   | End    | 3774          |
| GI       | none   | Score  | 157           |
| Exons    | 3274..3453, 3439..3774, 3525..3656, 3681..3728 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22120  | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022  | Strand  | +                    |
| Start    | 1195   | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3328   | End     | 3723                 |
| GI       | none   | Score   | 57                   |
| Exons    | 3328..3360, 3330..3356, 3364..3723, 3371..3511, 3376..3693, 3456..3722 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22120  | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022  | Strand  | +                    |
| Start    | 1195   | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o5.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 3436   | End     | 3738                 |
| GI       | none   | Score   | 396                  |
| Exons    | 3436..3738, 3437..3514, 3439..3729, 3465..3737 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22120                              | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022                              | Strand  | +                    |
| Start    | 1195                               | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o2.tw         | Method  | TBLASTX:Wheat        |
| Start    | 3739                               | End     | 4248                 |
| GI       | none                               | Score   | 619                  |
| Exons    | 3739..4248, 3747..4157, 3781..4161 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22120                      | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022                      | Strand  | +                    |
| Start    | 1195                       | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 3745                       | End     | 3990                 |
| GI       | none                       | Score   | 209                  |
| Exons    | 3745..3990                 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22120                              | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022                              | Strand  | +                    |
| Start    | 1195                               | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 3811                               | End     | 4174                 |
| GI       | none                               | Score   | 477                  |
| Exons    | 3811..4164, 3813..4157, 3851..4174 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22120                              | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022                              | Strand  | +                    |
| Start    | 1195                               | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o3.tw         | Method  | TBLASTX:Wheat        |
| Start    | 4252                               | End     | 4731                 |
| GI       | none                               | Score   | 587                  |
| Exons    | 4252..4731, 4285..4695, 4476..4730 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22120 | Seq. ID | OJ990605_40.9919.C10 |
|----------|-------|---------|----------------------|

|          |  |         |                      |
|----------|--|---------|----------------------|
| Gene No. | 46022  | Strand  | +                    |
| Start    | 1195   | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 4438   | End     | 4755                 |
| GI       | none   | Score   | 90                   |
| Exons    | 4438..4611, 4612..4755, 4614..4754                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22120  | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022  | Strand  | +                    |
| Start    | 1195   | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4519   | End     | 4779                 |
| GI       | none   | Score   | 300                  |
| Exons    | 4519..4779, 4524..4778   |         |                      |
|          |  |         |                      |
| Seq. No. | 22120  | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022  | Strand  | +                    |
| Start    | 1195   | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 4578   | End     | 4869                 |
| GI       | none   | Score   | 390                  |
| Exons    | 4578..4865, 4579..4869   |         |                      |
|          |  |         |                      |
| Seq. No. | 22120  | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022  | Strand  | +                    |
| Start    | 1195   | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4738   | End     | 5364                 |
| GI       | none   | Score   | 729                  |
| Exons    | 4738..5364, 4740..5363   |         |                      |
|          |  |         |                      |
| Seq. No. | 22120  | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022  | Strand  | +                    |
| Start    | 1195   | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 4918   | End     | 5505                 |
| GI       | none   | Score   | 226                  |
| Exons    | 4918..5079, 4924..5070, 4926..5072, 5077..5505, 5082..5174, 5244..5504 |         |                      |
|          |  |         |                      |
| Seq. No. | 22120  | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022  | Strand  | +                    |
| Start    | 1195   | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o6.tw   | Method  | TBLASTX:Wheat        |
| Start    | 5364   | End     | 5697                 |
| GI       | none   | Score   | 366                  |
| Exons    | 5364..5696, 5365..5697   |         |                      |
|          |  |         |                      |
| Seq. No. | 22120  | Seq. ID | OJ990605_40.9919.C10 |
| Gene No. | 46022  | Strand  | +                    |
| Start    | 1195   | End     | 5745                 |
| Name     | OJ990605_40.9919.C10.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 5506   | End     | 5718                 |
| GI       | none   | Score   | 206                  |
| Exons    | 5506..5718   |         |                      |
|          |  |         |                      |
| Seq. No. | 22121  | Seq. ID | OJ990605_37.9922.C2  |

Gene No. 46023 Strand +  
 Start 304 End 3223  
 Name OJ990605\_37.9922.C2.o1.np Method AAT/NAP  
 Start 304 End 3220  
 GI 3834304 Score 1267  
 Exons 304..681, 1177..1358, 1730..1879, 1953..2069, 2193..2294,  
 2518..2691, 2846..3220  
 GI Descrip. (AC005679) Contains similarity to gi|1786244 hypothetical 24.9  
 kD protein in surA-hepA intergenic region yab0 from Escherichia  
 coli genome gb|AE000116, and to hypothetical YABO family  
 PF|00849. [Arabidopsis thaliana]

Seq. No. 22121 Seq. ID OJ990605\_37.9922.C2  
 Gene No. 46023 Strand +  
 Start 304 End 3223  
 Name OJ990605\_37.9922.C2.o1.gs Method GENSCAN  
 Start 318 End 3223  
 GI none Score .88  
 Exons 318..632, 1038..1109, 1200..1358, 1730..1858, 1953..2069,  
 2518..2676, 2849..3223

Seq. No. 22121 Seq. ID OJ990605\_37.9922.C2  
 Gene No. 46024 Strand -  
 Start 3677 End 4120  
 Name OJ990605\_37.9922.C2.o2.tm Method TBLASTX:Maize  
 Start 531 End 1810  
 GI none Score 156  
 Exons 531..641, 539..634, 1036..1119, 1038..1124, 1191..1358,  
 1191..1355, 1199..1360, 1199..1378, 1712..1810, 1729..1809

Seq. No. 22121 Seq. ID OJ990605\_37.9922.C2  
 Gene No. 46024 Strand -  
 Start 3677 End 4120  
 Name OJ990605\_37.9922.C2.o2.ts Method TBLASTX:Soybean  
 Start 2223 End 3067  
 GI 5606701 Score 79  
 Exons 2223..2297, 2515..2679, 2517..2672, 2846..2956, 2848..2982,  
 2980..3066, 2990..3067  
 GI Descrip. 3834304 4.0e-41 (AC005679) Contains similarity to gi\_1786244  
 hypothetical 24.9 kD protein in surA-hepA intergenic region yab0  
 from Escherichia coli genome gb\_AE000116, and to hypothetical  
 YABO family PF\_00849. [Arabidopsis thaliana]

Seq. No. 22121 Seq. ID OJ990605\_37.9922.C2  
 Gene No. 46024 Strand -  
 Start 3677 End 4120  
 Name OJ990605\_37.9922.C2.o4.tm Method TBLASTX:Maize  
 Start 2498 End 2976  
 GI none Score 182  
 Exons 2498..2683, 2515..2685, 2517..2684, 2838..2975, 2843..2974,  
 2845..2976

Seq. No. 22121 Seq. ID OJ990605\_37.9922.C2  
 Gene No. 46024 Strand -  
 Start 3677 End 4120  
 Name OJ990605\_37.9922.C2.o1.tm Method TBLASTX:Maize  
 Start 3005 End 3225

|          |  |         |                     |
|----------|--|---------|---------------------|
| GI       | none   | Score   | 340                 |
| Exons    | 3005..3214, 3005..3223, 3010..3222, 3010..3225                         |         |                     |
| Seq. No. | 22121  | Seq. ID | OJ990605_37.9922.C2 |
| Gene No. | 46024  | Strand  | -                   |
| Start    | 3677   | End     | 4120                |
| Name     | OJ990605_37.9922.C2.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 3672   | End     | 3898                |
| GI       | none   | Score   | 246                 |
| Exons    | 3672..3749, 3675..3866, 3677..3898, 3677..3865, 3770..3847, 3809..3847 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22121                     | Seq. ID | OJ990605_37.9922.C2 |
| Gene No. | 46024                     | Strand  | -                   |
| Start    | 3677                      | End     | 4120                |
| Name     | OJ990605_37.9922.C2.o2.gs | Method  | GENSCAN             |
| Start    | 3677                      | End     | 4078                |
| GI       | none                      | Score   | .75                 |
| Exons    | 3677..4078                |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22121                     | Seq. ID | OJ990605_37.9922.C2 |
| Gene No. | 46024                     | Strand  | -                   |
| Start    | 3677                      | End     | 4120                |
| Name     | OJ990605_37.9922.C2.o1.ts | Method  | TBLASTX:Soybean     |
| Start    | 3872                      | End     | 4120                |
| GI       | none                      | Score   | 171                 |
| Exons    | 3872..4120, 3924..4118    |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22122   | Seq. ID | OJ990605_37.9922.C3 |
| Gene No.    | 46025   | Strand  | -                   |
| Start       | 1148  | End     | 8928                |
| Name        | OJ990605_37.9922.C3.o1.gp   | Method  | AAT/GAP             |
| Start       | 822   | End     | 1450                |
| GI          | 19315_1.R1084   | Score   | 1167                |
| Exons       | 822..1450   |         |                     |
| GI Descrip. | '4530509/gb AAD22071.1  2.0e-11 (AF124748) putative RNA-binding protein [Larix laricina]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46025  | Strand  | -                   |
| Start    | 1148   | End     | 8928                |
| Name     | OJ990605_37.9922.C3.o1.gs  | Method  | GENSCAN             |
| Start    | 1148   | End     | 8928                |
| GI       | none   | Score   | .88                 |
| Exons    | 1148..1441, 1530..1703, 1884..1975, 2498..2620, 3904..3965, 4060..4136, 4799..4901, 5179..5240, 6246..6572, 6763..6820, 8305..8380, 8583..8725, 8846..8928 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46025  | Strand  | -                   |
| Start    | 1148   | End     | 8928                |
| Name     | OJ990605_37.9922.C3.o1.np  | Method  | AAT/NAP             |
| Start    | 1151   | End     | 6392                |
| GI       | 4587549  | Score   | 886                 |
| Exons    | 1151..1441, 1530..1703, 1884..1962, 2500..2620, 2724..2754, 3392..3467, 3722..3809, 3904..3965, 4060..4136, 4799..4901, 5179..5243, 6267..6392 |         |                     |

GI Descrip. (AC006577) Similar to gb|U55861 RNA binding protein nucleolysin (TIAR) from Mus musculus and contains several PF|00076 RNA recognition motif domains. ESTs gb|T21032 and gb|T44127 come from this gene. [Arabidopsis t...

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22122   | Seq. ID | OJ990605_37.9922.C3 |
| Gene No.    | 46025   | Strand  | -                   |
| Start       | 1148  | End     | 8928                |
| Name        | OJ990605_37.9922.C3.o2.gp   | Method  | AAT/GAP             |
| Start       | 4106  | End     | 6653                |
| GI          | 26236_1.R1084   | Score   | 1129                |
| Exons       | 4106..4136, 4799..4901, 5179..5240, 6246..6653  |         |                     |
| GI Descrip. | '4680340/gb AAD27631.1 AF128457_5 9.0e-23 (AF128457) putative nucleolysin [Oryza sativa subsp. indica]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46026  | Strand  | -                   |
| Start    | 10388  | End     | 19286               |
| Name     | OJ990605_37.9922.C3.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 872  | End     | 4877                |
| GI       | none   | Score   | 46                  |
| Exons    | 872..904, 873..935, 1031..1072, 1040..1096, 1055..1144, 1148..1201, 1149..1235, 1158..1223, 1165..1362, 1272..1358, 1362..1442, 1398..1442, 1527..1634, 1530..1706, 1531..1704, 1532..1708, 1881..1982, 1882..1974, 2498..2617, 2502..2618, 2502..2627, 2503..2625, 2718..2756, 2719..2769, 2723..2758, 3381..3467, 3388..3465, 3390..3467, 3398..3469, 3713..3826, 3721..3876, 3902..3970, 3903..3968, 3906..3971, 3910..3969, 4053..4139, 4059..4139, 4791..4877, 4799..4876 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46026  | Strand  | -                   |
| Start    | 10388  | End     | 19286               |
| Name     | OJ990605_37.9922.C3.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 1283   | End     | 5243                |
| GI       | none   | Score   | 73                  |
| Exons    | 1283..1366, 1398..1442, 1527..1634, 1530..1715, 1531..1677, 1881..1991, 1882..1959, 2502..2567, 2523..2627, 2575..2628, 2578..2634, 2723..2761, 3390..3467, 3398..3469, 3721..3810, 3722..3826, 3902..3961, 3903..3968, 4059..4139, 4799..4900, 4800..4898, 5173..5241, 5178..5243 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46026  | Strand  | -                   |
| Start    | 10388  | End     | 19286               |
| Name     | OJ990605_37.9922.C3.o2.gs  | Method  | GENSCAN             |
| Start    | 10388  | End     | 19215               |
| GI       | none   | Score   | .71                 |
| Exons    | 10388..12066, 13111..13235, 13723..13913, 14086..15929, 16085..16235, 16328..16367, 16699..16821, 16902..17066, 17178..17268, 17481..17565, 17653..17817, 19174..19215 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22122                     | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46026                     | Strand  | -                   |
| Start    | 10388                     | End     | 19286               |
| Name     | OJ990605_37.9922.C3.o5.tm | Method  | TBLASTX:Maize       |
| Start    | 11128                     | End     | 11421               |

GI none Score 81  
Exons 11128..11217, 11147..11227, 11147..11218, 11216..11419,  
11224..11421

Seq. No. 22122 Seq. ID OJ990605\_37.9922.C3  
Gene No. 46026 Strand -  
Start 10388 End 19286  
Name OJ990605\_37.9922.C3.o3.gp Method AAT/GAP  
Start 12632 End 13104  
GI none Score 862  
Exons 12632..13104

Seq. No. 22122 Seq. ID OJ990605\_37.9922.C3  
Gene No. 46026 Strand -  
Start 10388 End 19286  
Name OJ990605\_37.9922.C3.o2.np Method AAT/NAP  
Start 13058 End 19286  
GI 4104929 Score 1530  
Exons 13058..13235, 13723..13913, 14086..15929, 16085..16223,  
16292..16367, 16699..16821, 16902..17066, 17178..17268,  
17481..17565, 17653..17808, 17905..17961, 18081..18179,  
19174..19286

GI Descrip. (AF042195) auxin response factor 7 [Arabidopsis thaliana]

Seq. No. 22122 Seq. ID OJ990605\_37.9922.C3  
Gene No. 46026 Strand -  
Start 10388 End 19286  
Name OJ990605\_37.9922.C3.o1.tc Method TBLASTX:Cress  
Start 13061 End 19272  
GI none Score 80  
Exons 13061..13234, 13098..13250, 13718..13855, 13722..13922,  
13780..13914, 13782..13916, 14896..15060, 15778..15843,  
15794..15829, 15856..15930, 15857..15931, 16081..16218,  
16089..16229, 16280..16369, 16280..16369, 16294..16392,  
16693..16755, 16695..16760, 16767..16820, 16768..16809,  
16873..17064, 16874..17068, 16875..17069, 17177..17269,  
17178..17270, 17464..17565, 17480..17566, 17651..17752,  
17653..17817, 17655..17807, 17893..17970, 17908..17970,  
18084..18143, 18088..18144, 18150..18182, 19171..19272,  
19172..19270

Seq. No. 22122 Seq. ID OJ990605\_37.9922.C3  
Gene No. 46026 Strand -  
Start 10388 End 19286  
Name OJ990605\_37.9922.C3.o1.tm Method TBLASTX:Maize  
Start 13080 End 16357  
GI none Score 204  
Exons 13080..13250, 13082..13234, 13715..13915, 13722..13922,  
13780..13914, 14083..14127, 14085..14123, 14112..14330,  
14112..14558, 14128..14559, 14132..14545, 14549..14905,  
14553..14906, 14555..14905, 14907..15044, 14913..15017,  
14917..15066, 14918..15019, 15068..15115, 15116..15166,  
15144..15209, 15158..15211, 15159..15212, 15312..15395,  
15317..15454, 15329..15385, 15398..15466, 15452..15934,  
15465..15929, 15469..15930, 16086..16223, 16087..16227,  
16289..16357, 16293..16355, 16298..16357



|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46026  | Strand  | -                   |
| Start    | 10388  | End     | 19286               |
| Name     | OJ990605_37.9922.C3.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 13106  | End     | 14394               |
| GI       | none   | Score   | 116                 |
| Exons    | 13106..13234, 13110..13235, 13722..13922, 13780..13914, 14083..14109, 14140..14223, 14156..14251, 14159..14245, 14326..14394 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22122                     | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46026                     | Strand  | -                   |
| Start    | 10388                     | End     | 19286               |
| Name     | OJ990605_37.9922.C3.o4.gp | Method  | AAT/GAP             |
| Start    | 14070                     | End     | 14532               |
| GI       | none                      | Score   | 703                 |
| Exons    | 14070..14532              |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46026  | Strand  | -                   |
| Start    | 10388  | End     | 19286               |
| Name     | OJ990605_37.9922.C3.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 14217  | End     | 14447               |
| GI       | none   | Score   | 129                 |
| Exons    | 14217..14330, 14219..14338, 14219..14326, 14326..14442, 14332..14433, 14334..14447, 14334..14447 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No.    | 46026  | Strand  | -                   |
| Start       | 10388  | End     | 19286               |
| Name        | OJ990605_37.9922.C3.o4.ts  | Method  | TBLASTX:Soybean     |
| Start       | 16077  | End     | 17006               |
| GI          | 5509656  | Score   | 103                 |
| Exons       | 16077..16229, 16081..16224, 16081..16239, 16280..16366, 16281..16367, 16288..16368, 16290..16376, 16693..16755, 16695..16760, 16767..16823, 16768..16824, 16889..16987, 16908..17006, 16910..16978 |         |                     |
| GI Descrip. | 4103243 7.0e-51 (AF022368) BIPOSTO [Arabidopsis thaliana]  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46026  | Strand  | -                   |
| Start    | 10388  | End     | 19286               |
| Name     | OJ990605_37.9922.C3.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 16693  | End     | 17565               |
| GI       | none   | Score   | 166                 |
| Exons    | 16693..16857, 16695..16823, 16729..16824, 16900..17070, 16902..17069, 17177..17296, 17178..17270, 17179..17271, 17464..17565, 17470..17565 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46026  | Strand  | -                   |
| Start    | 10388  | End     | 19286               |
| Name     | OJ990605_37.9922.C3.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 17491  | End     | 17952               |
| GI       | none   | Score   | 66                  |
| Exons    | 17491..17565, 17498..17560, 17653..17817, 17671..17745, 17908..17952 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22122  | Seq. ID | OJ990605_37.9922.C3 |
| Gene No. | 46026  | Strand  | -                   |
| Start    | 10388  | End     | 19286               |
| Name     | OJ990605_37.9922.C3.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 17659  | End     | 19258               |
| GI       | none   | Score   | 138                 |
| Exons    | 17659..17817, 17662..17763, 17664..17816, 17886..17960,<br>17902..17961, 17902..17961, 17903..17992, 18067..18180,<br>18081..18182, 19171..19257, 19171..19257, 19172..19258 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22123                     | Seq. ID | OJ990605_37.9922.C4 |
| Gene No. | 46027                     | Strand  | -                   |
| Start    | 2075                      | End     | 2212                |
| Name     | OJ990605_37.9922.C4.o2.gs | Method  | GENSCAN             |
| Start    | 2075                      | End     | 2212                |
| GI       | none                      | Score   | .7                  |
| Exons    | 2075..2212                |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22124                     | Seq. ID | OJ990605_37.9922.C5 |
| Gene No. | 46028                     | Strand  | +                   |
| Start    | 2340                      | End     | 3861                |
| Name     | OJ990605_37.9922.C5.o1.gs | Method  | GENSCAN             |
| Start    | 2340                      | End     | 3861                |
| GI       | none                      | Score   | .61                 |
| Exons    | 2340..2400, 3530..3861    |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22124   | Seq. ID | OJ990605_37.9922.C5 |
| Gene No.    | 46029   | Strand  | +                   |
| Start       | 6913  | End     | 7946                |
| Name        | OJ990605_37.9922.C5.o1.np                                   | Method  | AAT/NAP             |
| Start       | 6913  | End     | 7946                |
| GI          | 6721547   | Score   | 93                  |
| Exons       | 6913..7026, 7859..7946                                      |         |                     |
| GI Descrip. | (AP001073) Similar to Oryza sativa gene for Pib. (AB013448) |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22124                     | Seq. ID | OJ990605_37.9922.C5 |
| Gene No. | 46029                     | Strand  | +                   |
| Start    | 6913                      | End     | 7946                |
| Name     | OJ990605_37.9922.C5.o1.gp | Method  | AAT/GAP             |
| Start    | 7767                      | End     | 7946                |
| GI       | none                      | Score   | 343                 |
| Exons    | 7767..7946                |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22124                     | Seq. ID | OJ990605_37.9922.C5 |
| Gene No. | 46030                     | Strand  | -                   |
| Start    | 4651                      | End     | 7895                |
| Name     | OJ990605_37.9922.C5.o2.gs | Method  | GENSCAN             |
| Start    | 4651                      | End     | 7895                |
| GI       | none                      | Score   | .49                 |
| Exons    | 4651..4844, 7554..7895    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22125                     | Seq. ID | OJ990605_37.9922.C6 |
| Gene No. | 46031                     | Strand  | +                   |
| Start    | 2372                      | End     | 4341                |
| Name     | OJ990605_37.9922.C6.o3.gs | Method  | GENSCAN             |
| Start    | 2372                      | End     | 4341                |

GI none Score .83  
Exons 2372..2593, 4052..4180, 4270..4341

Seq. No. 22125 Seq. ID OJ990605\_37.9922.C6  
Gene No. 46032 Strand -  
Start 8 End 148  
Name OJ990605\_37.9922.C6.o1.gs Method GENSCAN  
Start 8 End 148  
GI none Score .55  
Exons 8..148

Seq. No. 22125 Seq. ID OJ990605\_37.9922.C6  
Gene No. 46033 Strand -  
Start 1123 End 2116  
Name OJ990605\_37.9922.C6.o2.gs Method GENSCAN  
Start 1123 End 2116  
GI none Score .47  
Exons 1123..1636, 1746..2116

Seq. No. 22125 Seq. ID OJ990605\_37.9922.C6  
Gene No. 46033 Strand -  
Start 1123 End 2116  
Name OJ990605\_37.9922.C6.o1.np Method AAT/NAP  
Start 1126 End 2113  
GI 6751704 Score 515  
Exons 1126..2113  
GI Descrip. (AC018848) hypothetical protein [Arabidopsis thaliana]

Seq. No. 22125 Seq. ID OJ990605\_37.9922.C6  
Gene No. 46034 Strand -  
Start 4851 End 6742  
Name OJ990605\_37.9922.C6.o1.gp Method AAT/GAP  
Start 4740 End 6518  
GI 60\_1.R1084 Score 1607  
Exons 4740..5108, 5229..5346, 5440..5519, 5600..5680, 5835..5918, 6355..6518  
GI Descrip. '3252794/dbj|BAA29041| 0.0e+00 (AB015615) isoamylase [Oryza sativa]'

Seq. No. 22125 Seq. ID OJ990605\_37.9922.C6  
Gene No. 46034 Strand -  
Start 4851 End 6742  
Name OJ990605\_37.9922.C6.o1.tm Method TBLASTX:Maize  
Start 4823 End 5662  
GI none Score 182  
Exons 4823..4981, 4827..5105, 4829..5107, 4839..5126, 5021..5110, 5232..5333, 5232..5348, 5236..5352, 5435..5494, 5435..5497, 5439..5501, 5439..5498, 5481..5513, 5486..5518, 5487..5522, 5582..5662, 5595..5660

Seq. No. 22125 Seq. ID OJ990605\_37.9922.C6  
Gene No. 46034 Strand -  
Start 4851 End 6742  
Name OJ990605\_37.9922.C6.o2.np Method AAT/NAP  
Start 4829 End 6742  
GI 3252794 Score 1286  
Exons 4829..5108, 5229..5346, 5440..5519, 5600..5680, 5835..5918,

6355..6516, 6718..6742  
 GI Descrip. (AB015615) isoamylase [Oryza sativa]

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22125  | Seq. ID | OJ990605_37.9922.C6 |
| Gene No. | 46034  | Strand  | -                   |
| Start    | 4851   | End     | 6742                |
| Name     | OJ990605_37.9922.C6.o4.gs                                  | Method  | GENSCAN             |
| Start    | 4851   | End     | 6513                |
| GI       | none   | Score   | .98                 |
| Exons    | 4851..5108, 5229..5346, 5440..5519, 5600..5680, 6355..6513 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22125  | Seq. ID | OJ990605_37.9922.C6 |
| Gene No. | 46034  | Strand  | -                   |
| Start    | 4851   | End     | 6742                |
| Name     | OJ990605_37.9922.C6.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 4983   | End     | 5471                |
| GI       | none   | Score   | 77                  |
| Exons    | 4983..5105, 5221..5319, 5225..5320, 5226..5321, 5226..5342, 5227..5343, 5439..5471 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22125  | Seq. ID | OJ990605_37.9922.C6 |
| Gene No. | 46034  | Strand  | -                   |
| Start    | 4851   | End     | 6742                |
| Name     | OJ990605_37.9922.C6.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 5007   | End     | 5665                |
| GI       | none   | Score   | 61                  |
| Exons    | 5007..5126, 5013..5087, 5226..5345, 5227..5343, 5442..5498, 5484..5513, 5582..5665, 5607..5663, 5608..5664 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22125  | Seq. ID | OJ990605_37.9922.C6 |
| Gene No. | 46034  | Strand  | -                   |
| Start    | 4851   | End     | 6742                |
| Name     | OJ990605_37.9922.C6.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 5824   | End     | 6519                |
| GI       | none   | Score   | 115                 |
| Exons    | 5824..5919, 5834..5920, 5835..5921, 6348..6515, 6353..6514, 6355..6516, 6436..6519 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22125  | Seq. ID | OJ990605_37.9922.C6 |
| Gene No. | 46034  | Strand  | -                   |
| Start    | 4851   | End     | 6742                |
| Name     | OJ990605_37.9922.C6.o2.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 6361   | End     | 6519                |
| GI       | none   | Score   | 108                 |
| Exons    | 6361..6390, 6397..6516, 6437..6511, 6439..6519 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22126  | Seq. ID | OJ990605_37.9922.C7 |
| Gene No. | 46035  | Strand  | -                   |
| Start    | 1  | End     | 4335                |
| Name     | OJ990605_37.9922.C7.o1.gp  | Method  | AAT/GAP             |
| Start    | 1  | End     | 4335                |
| GI       | 60_1.R1084   | Score   | 2198                |
| Exons    | 1..193, 635..721, 1075..1201, 1290..1361, 1760..1844, 1959..2066, 2149..2290, 2872..2948, 3342..3494, 3851..3943, 4048..4236, 4310..4335 |         |                     |

GI Descrip. '3252794/dbj|BAA29041| 0.0e+00 (AB015615) isoamylase [Oryza sativa]'

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22126  | Seq. ID | OJ990605_37.9922.C7 |
| Gene No.    | 46035  | Strand  | -                   |
| Start       | 1  | End     | 4335                |
| Name        | OJ990605_37.9922.C7.ol.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 4259                |
| GI          | 3252794  | Score   | 1905                |
| Exons       | 1..193, 635..721, 1075..1201, 1290..1361, 1760..1845, 1959..2066, 2149..2290, 2872..2948, 3342..3494, 3851..3943, 4048..4259 |         |                     |
| GI Descrip. | (AB015615) isoamylase [Oryza sativa]   |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22126  | Seq. ID | OJ990605_37.9922.C7 |
| Gene No. | 46035  | Strand  | -                   |
| Start    | 1  | End     | 4335                |
| Name     | OJ990605_37.9922.C7.ol.gs  | Method  | GENSCAN             |
| Start    | 101  | End     | 4239                |
| GI       | none   | Score   | .64                 |
| Exons    | 101..193, 635..721, 1075..1201, 1290..1361, 1760..1844, 2030..2066, 2149..2290, 2872..2948, 3342..3494, 3851..3943, 4048..4239 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22126  | Seq. ID | OJ990605_37.9922.C7 |
| Gene No. | 46035  | Strand  | -                   |
| Start    | 1  | End     | 4335                |
| Name     | OJ990605_37.9922.C7.ol.tm  | Method  | TBLASTX:Maize       |
| Start    | 635  | End     | 3482                |
| GI       | none   | Score   | 139                 |
| Exons    | 635..721, 636..740, 636..722, 1066..1233, 1070..1204, 1282..1362, 1290..1367, 1291..1362, 1292..1363, 1756..1860, 1763..1873, 1935..2066, 1936..2067, 1937..2071, 1940..2068, 1959..2069, 2138..2290, 2146..2295, 2871..2951, 2872..2955, 2875..2949, 3334..3480, 3364..3480, 3366..3482, 3366..3482 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22126  | Seq. ID | OJ990605_37.9922.C7 |
| Gene No. | 46035  | Strand  | -                   |
| Start    | 1  | End     | 4335                |
| Name     | OJ990605_37.9922.C7.ol.ts  | Method  | TBLASTX:Soybean     |
| Start    | 1153   | End     | 2227                |
| GI       | none   | Score   | 55                  |
| Exons    | 1153..1206, 1156..1233, 1292..1363, 1298..1363, 1299..1367, 1756..1860, 1763..1873, 1935..2066, 1960..2049, 2016..2069, 2020..2067, 2138..2227, 2146..2226 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22127   | Seq. ID | OJ990605_37.9922.C8 |
| Gene No.    | 46036   | Strand  | +                   |
| Start       | 7460  | End     | 9792                |
| Name        | OJ990605_37.9922.C8.ol.np                           | Method  | AAT/NAP             |
| Start       | 7460  | End     | 9428                |
| GI          | 2827528   | Score   | 590                 |
| Exons       | 7460..7530, 8650..8800, 8875..9428                  |         |                     |
| GI Descrip. | (AL021633) predicted protein [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22127                     | Seq. ID | OJ990605_37.9922.C8 |
| Gene No. | 46036                     | Strand  | +                   |
| Start    | 7460                      | End     | 9792                |
| Name     | OJ990605_37.9922.C8.ol.gp | Method  | AAT/GAP             |

Start 8553  
GI 428385  
Exons 8553..8762

End 8762  
Score 408

Seq. No. 22127  
Gene No. 46036  
Start 7460  
Name OJ990605\_37.9922.C8.o2.gp  
Start 9147  
GI 18766\_1.R1084  
Exons 9147..9792  
GI Descrip. '2827528/emb|CAA16536.1| 4.0e-17 (AL021633) predicted protein [Arabidopsis thaliana]'

Seq. ID OJ990605\_37.9922.C8  
Strand +  
End 9792  
Method AAT/GAP  
End 9792  
Score 1238

Seq. No. 22127  
Gene No. 46037  
Start 8468  
Name OJ990605\_37.9922.C8.o2.gs  
Start 8468  
GI none  
Exons 8468..8895, 8970..9483, 13220..13636

Seq. ID OJ990605\_37.9922.C8  
Strand -  
End 13636  
Method GENSCAN  
End 13636  
Score .46

Seq. No. 22127  
Gene No. 46037  
Start 8468  
Name OJ990605\_37.9922.C8.o1.ts  
Start 8632  
GI none  
Exons 8632..8802, 8633..8800, 8868..9023, 8872..9024

Seq. ID OJ990605\_37.9922.C8  
Strand -  
End 13636  
Method TBLASTX:Soybean  
End 9024  
Score 172

Seq. No. 22127  
Gene No. 46037  
Start 8468  
Name OJ990605\_37.9922.C8.o1.tc  
Start 8633  
GI none  
Exons 8633..8800, 8872..9156, 8874..9074, 9120..9350, 9205..9369

Seq. ID OJ990605\_37.9922.C8  
Strand -  
End 13636  
Method TBLASTX:Cress  
End 9369  
Score 140

Seq. No. 22127  
Gene No. 46037  
Start 8468  
Name OJ990605\_37.9922.C8.o1.tm  
Start 8635  
GI none  
Exons 8635..8799, 8636..8800, 8872..8973, 8877..8972

Seq. ID OJ990605\_37.9922.C8  
Strand -  
End 13636  
Method TBLASTX:Maize  
End 8973  
Score 214

Seq. No. 22127  
Gene No. 46037  
Start 8468  
Name OJ990605\_37.9922.C8.o2.ts  
Start 9205  
GI none  
Exons 9205..9375, 9240..9350

Seq. ID OJ990605\_37.9922.C8  
Strand -  
End 13636  
Method TBLASTX:Soybean  
End 9375  
Score 195

Seq. No. 22127  
Gene No. 46037  
Start 8468

Seq. ID OJ990605\_37.9922.C8  
Strand -  
End 13636

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990605_37.9922.C8.o2.tm                      | Method | TBLASTX:Maize |
| Start | 9226   | End    | 9400          |
| GI    | none   | Score  | 223           |
| Exons | 9226..9393, 9240..9356, 9280..9399, 9287..9400 |        |               |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22128   | Seq. ID | OJ990605_37.9922.C9 |
| Gene No. | 46038   | Strand  | +                   |
| Start    | 997   | End     | 6899                |
| Name     | OJ990605_37.9922.C9.o1.np   | Method  | AAT/NAP             |
| Start    | 997   | End     | 5739                |
| GI       | 6498441   | Score   | 6130                |
| Exons    | 997..2061, 2392..2855, 2919..3292, 3476..3610, 3785..4507, 4679..5739 |         |                     |

GI Descrip. (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa]

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22128                     | Seq. ID | OJ990605_37.9922.C9 |
| Gene No. | 46038                     | Strand  | +                   |
| Start    | 997                       | End     | 6899                |
| Name     | OJ990605_37.9922.C9.o2.np | Method  | AAT/NAP             |
| Start    | 4950                      | End     | 6899                |
| GI       | 4680186                   | Score   | 253                 |
| Exons    | 4950..5062, 6669..6899    |         |                     |

GI Descrip. (AF111709) unknown [Oryza sativa subsp. indica]

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22128                              | Seq. ID | OJ990605_37.9922.C9 |
| Gene No. | 46039                              | Strand  | -                   |
| Start    | 6446                               | End     | 6827                |
| Name     | OJ990605_37.9922.C9.o4.tm          | Method  | TBLASTX:Maize       |
| Start    | 1188                               | End     | 1436                |
| GI       | none                               | Score   | 195                 |
| Exons    | 1188..1436, 1190..1435, 1284..1436 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22128  | Seq. ID | OJ990605_37.9922.C9 |
| Gene No. | 46039  | Strand  | -                   |
| Start    | 6446   | End     | 6827                |
| Name     | OJ990605_37.9922.C9.o6.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 1200   | End     | 1538                |
| GI       | none   | Score   | 109                 |
| Exons    | 1200..1298, 1217..1297, 1265..1504, 1281..1538 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22128                              | Seq. ID | OJ990605_37.9922.C9 |
| Gene No. | 46039                              | Strand  | -                   |
| Start    | 6446                               | End     | 6827                |
| Name     | OJ990605_37.9922.C9.o3.tw          | Method  | TBLASTX:Wheat       |
| Start    | 2276                               | End     | 2762                |
| GI       | none                               | Score   | 400                 |
| Exons    | 2276..2449, 2277..2762, 2471..2731 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22128                              | Seq. ID | OJ990605_37.9922.C9 |
| Gene No. | 46039                              | Strand  | -                   |
| Start    | 6446                               | End     | 6827                |
| Name     | OJ990605_37.9922.C9.o1.tw          | Method  | TBLASTX:Wheat       |
| Start    | 2927                               | End     | 3389                |
| GI       | none                               | Score   | 576                 |
| Exons    | 2927..3382, 2928..3389, 2928..3383 |         |                     |

Seq. No. 22128  
 Gene No. 46039  
 Start 6446  
 Name OJ990605\_37.9922.C9.o3.ts  
 Start 2967  
 GI none  
 Exons 2967..3191, 3198..3332

Seq. ID OJ990605\_37.9922.C9  
 Strand -  
 End 6827  
 Method TBLASTX:Soybean  
 End 3332  
 Score 117

Seq. No. 22128  
 Gene No. 46039  
 Start 6446  
 Name OJ990605\_37.9922.C9.o1.tm  
 Start 3057  
 GI none  
 Exons 3057..3413, 3092..3403, 3297..3413

Seq. ID OJ990605\_37.9922.C9  
 Strand -  
 End 6827  
 Method TBLASTX:Maize  
 End 3413  
 Score 389

Seq. No. 22128  
 Gene No. 46039  
 Start 6446  
 Name OJ990605\_37.9922.C9.o2.tm  
 Start 3440  
 GI none  
 Exons 3440..3805, 3441..3824

Seq. ID OJ990605\_37.9922.C9  
 Strand -  
 End 6827  
 Method TBLASTX:Maize  
 End 3824  
 Score 361

Seq. No. 22128  
 Gene No. 46039  
 Start 6446  
 Name OJ990605\_37.9922.C9.o2.tw  
 Start 3497  
 GI none  
 Exons 3497..3922, 3498..3920, 6267..6311

Seq. ID OJ990605\_37.9922.C9  
 Strand -  
 End 6827  
 Method TBLASTX:Wheat  
 End 6311  
 Score 486

Seq. No. 22128  
 Gene No. 46039  
 Start 6446  
 Name OJ990605\_37.9922.C9.o1.ts  
 Start 3576  
 GI none  
 Exons 3576..3947, 3593..3736

Seq. ID OJ990605\_37.9922.C9  
 Strand -  
 End 6827  
 Method TBLASTX:Soybean  
 End 3947  
 Score 274

Seq. No. 22128  
 Gene No. 46039  
 Start 6446  
 Name OJ990605\_37.9922.C9.o5.tw  
 Start 4380  
 GI none  
 Exons 4380..4466, 4462..4629, 4463..4630, 4664..4813, 4673..4798, 4675..4812

Seq. ID OJ990605\_37.9922.C9  
 Strand -  
 End 6827  
 Method TBLASTX:Wheat  
 End 4813  
 Score 67

Seq. No. 22128  
 Gene No. 46039  
 Start 6446  
 Name OJ990605\_37.9922.C9.o2.ts  
 Start 4502  
 GI 5666795  
 Exons 4502..4600, 4676..4813, 4868..5068

Seq. ID OJ990605\_37.9922.C9  
 Strand -  
 End 6827  
 Method TBLASTX:Soybean  
 End 5068  
 Score 62



GI Descrip. 4206306 2.0e-10 (AF049110) prpol [Zea mays]

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22128                     | Seq. ID | OJ990605_37.9922.C9 |
| Gene No. | 46039                     | Strand  | -                   |
| Start    | 6446                      | End     | 6827                |
| Name     | OJ990605_37.9922.C9.o7.tw | Method  | TBLASTX:Wheat       |
| Start    | 4816                      | End     | 5128                |
| GI       | none                      | Score   | 192                 |
| Exons    | 4816..4992, 4868..5128    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22128  | Seq. ID | OJ990605_37.9922.C9 |
| Gene No. | 46039  | Strand  | -                   |
| Start    | 6446   | End     | 6827                |
| Name     | OJ990605_37.9922.C9.o3.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 5321   | End     | 5682                |
| GI       | none   | Score   | 112                 |
| Exons    | 5321..5464, 5445..5630, 5458..5643, 5514..5663, 5635..5682 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22128  | Seq. ID | OJ990605_37.9922.C9 |
| Gene No. | 46039  | Strand  | -                   |
| Start    | 6446   | End     | 6827                |
| Name     | OJ990605_37.9922.C9.o4.tw  | Method  | TBLASTX:Wheat       |
| Start    | 5324   | End     | 5714                |
| GI       | none   | Score   | 116                 |
| Exons    | 5324..5464, 5347..5469, 5445..5636, 5453..5614, 5455..5712, 5658..5714 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22128  | Seq. ID | OJ990605_37.9922.C9 |
| Gene No.    | 46039  | Strand  | -                   |
| Start       | 6446   | End     | 6827                |
| Name        | OJ990605_37.9922.C9.o2.gp  | Method  | AAT/GAP             |
| Start       | 6446   | End     | 6827                |
| GI          | uC-osflcyp033a04b1   | Score   | 671                 |
| Exons       | 6446..6827   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22129                        | Seq. ID | OJ990605_37.9922.C10 |
| Gene No. | 46040                        | Strand  | +                    |
| Start    | 1                            | End     | 1507                 |
| Name     | OJ990605_37.9922.C10.o1.np   | Method  | AAT/NAP              |
| Start    | 1                            | End     | 1504                 |
| GI       | 6498441                      | Score   | 1010                 |
| Exons    | 1..40, 780..1129, 1223..1504 |         |                      |

GI Descrip. (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22129                      | Seq. ID | OJ990605_37.9922.C10 |
| Gene No. | 46040                      | Strand  | +                    |
| Start    | 1                          | End     | 1507                 |
| Name     | OJ990605_37.9922.C10.o1.gs | Method  | GENSCAN              |
| Start    | 370                        | End     | 1507                 |
| GI       | none                       | Score   | .86                  |
| Exons    | 370..376, 747..1507        |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22129 | Seq. ID | OJ990605_37.9922.C10 |
|----------|-------|---------|----------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46041  | Strand | -             |
| Start    | 2131   | End    | 5692          |
| Name     | OJ990605_37.9922.C10.o1.tw                               | Method | TBLASTX:Wheat |
| Start    | 887  | End    | 4322          |
| GI       | none   | Score  | 273           |
| Exons    | 887..1183, 931..1176, 1369..1491, 1370..1495, 4239..4322 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22129                      | Seq. ID | OJ990605_37.9922.C10 |
| Gene No. | 46041                      | Strand  | -                    |
| Start    | 2131                       | End     | 5692                 |
| Name     | OJ990605_37.9922.C10.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 1363                       | End     | 1516                 |
| GI       | none                       | Score   | 187                  |
| Exons    | 1363..1503, 1364..1516     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22129  | Seq. ID | OJ990605_37.9922.C10 |
| Gene No. | 46041  | Strand  | -                    |
| Start    | 2131   | End     | 5692                 |
| Name     | OJ990605_37.9922.C10.o2.gs   | Method  | GENSCAN              |
| Start    | 2131   | End     | 5692                 |
| GI       | none   | Score   | .59                  |
| Exons    | 2131..3198, 3231..3957, 4095..4263, 4291..4823, 4868..5100, 5239..5375, 5608..5692 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22129  | Seq. ID | OJ990605_37.9922.C10 |
| Gene No.    | 46041  | Strand  | -                    |
| Start       | 2131   | End     | 5692                 |
| Name        | OJ990605_37.9922.C10.o2.np                     | Method  | AAT/NAP              |
| Start       | 2134   | End     | 5355                 |
| GI          | 6907089  | Score   | 4273                 |
| Exons       | 2134..3991, 4095..5355                         |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22130                                    | Seq. ID | OJ990605_37.9922.C11 |
| Gene No. | 46042                                    | Strand  | +                    |
| Start    | 239                                      | End     | 1323                 |
| Name     | OJ990605_37.9922.C11.o1.gs               | Method  | GENSCAN              |
| Start    | 239                                      | End     | 1323                 |
| GI       | none                                     | Score   | .75                  |
| Exons    | 239..283, 413..502, 773..943, 1237..1323 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22130   | Seq. ID | OJ990605_37.9922.C11 |
| Gene No.    | 46043   | Strand  | -                    |
| Start       | 1   | End     | 976                  |
| Name        | OJ990605_37.9922.C11.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 976                  |
| GI          | 5922623   | Score   | 158                  |
| Exons       | 1..140, 328..443, 866..976  |         |                      |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6016856 dbj BAA85199.1  (AP000570) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22130                      | Seq. ID | OJ990605_37.9922.C11 |
| Gene No. | 46044                      | Strand  | -                    |
| Start    | 1476                       | End     | 2258                 |
| Name     | OJ990605_37.9922.C11.o2.gp | Method  | AAT/GAP              |
| Start    | 1476                       | End     | 1851                 |

GI 89874\_1.R1084 Score 696  
 Exons 1476..1851  
 GI Descrip. '3047095 4.0e-37 (AF058826) similar to eukaryotic protein kinase domains (Pfam: pkinase.hmm, score: 72.39) [Arabidopsis thaliana]'

Seq. No. 22130 Seq. ID OJ990605\_37.9922.C11  
 Gene No. 46044 Strand -  
 Start 1476 End 2258  
 Name OJ990605\_37.9922.C11.o2.gs Method GENSCAN  
 Start 1622 End 2191  
 GI none Score 1  
 Exons 1622..2191

Seq. No. 22130 Seq. ID OJ990605\_37.9922.C11  
 Gene No. 46044 Strand -  
 Start 1476 End 2258  
 Name OJ990605\_37.9922.C11.o2.np Method AAT/NAP  
 Start 1646 End 2258  
 GI 3015486 Score 412  
 Exons 1646..2258  
 GI Descrip. (U58473) receptor-like protein kinase [Lycopersicon esculentum]

Seq. No. 22130 Seq. ID OJ990605\_37.9922.C11  
 Gene No. 46044 Strand -  
 Start 1476 End 2258  
 Name OJ990605\_37.9922.C11.o1.tm Method TBLASTX:Maize  
 Start 1691 End 2207  
 GI none Score 299  
 Exons 1691..1831, 1814..1957, 1943..2206, 1968..2207

Seq. No. 22130 Seq. ID OJ990605\_37.9922.C11  
 Gene No. 46044 Strand -  
 Start 1476 End 2258  
 Name OJ990605\_37.9922.C11.o1.ts Method TBLASTX:Soybean  
 Start 1967 End 2224  
 GI none Score 95  
 Exons 1967..2071, 1968..2069, 2087..2224, 2088..2105, 2154..2213

Seq. No. 22131 Seq. ID OJ990605\_37.9922.C12  
 Gene No. 46045 Strand -  
 Start 1 End 2228  
 Name OJ990605\_37.9922.C12.o1.np Method AAT/NAP  
 Start 1 End 2228  
 GI 3047095 Score 750  
 Exons 1..25, 548..1198, 1301..1996, 2124..2228  
 GI Descrip. (AF058826) similar to eukaryotic protein kinase domains (Pfam: pkinase.hmm, score: 72.39) [Arabidopsis thaliana]

Seq. No. 22131 Seq. ID OJ990605\_37.9922.C12  
 Gene No. 46045 Strand -  
 Start 1 End 2228  
 Name OJ990605\_37.9922.C12.o1.gs Method GENSCAN  
 Start 163 End 2030  
 GI none Score .94  
 Exons 163..290, 548..2030

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22131                                  | Seq. ID | OJ990605_37.9922.C12 |
| Gene No. | 46045                                  | Strand  | -                    |
| Start    | 1                                      | End     | 2228                 |
| Name     | OJ990605_37.9922.C12.o1.tm             | Method  | TBLASTX:Maize        |
| Start    | 543                                    | End     | 869                  |
| GI       | none                                   | Score   | 45                   |
| Exons    | 543..701, 544..636, 682..807, 708..869 |         |                      |

|          |                                |         |                      |
|----------|--------------------------------|---------|----------------------|
| Seq. No. | 22131                          | Seq. ID | OJ990605_37.9922.C12 |
| Gene No. | 46045                          | Strand  | -                    |
| Start    | 1                              | End     | 2228                 |
| Name     | OJ990605_37.9922.C12.o2.tc     | Method  | TBLASTX:Cress        |
| Start    | 543                            | End     | 1826                 |
| GI       | none                           | Score   | 56                   |
| Exons    | 543..692, 690..836, 1752..1826 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22131                      | Seq. ID | OJ990605_37.9922.C12 |
| Gene No. | 46045                      | Strand  | -                    |
| Start    | 1                          | End     | 2228                 |
| Name     | OJ990605_37.9922.C12.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 543                        | End     | 845                  |
| GI       | none                       | Score   | 120                  |
| Exons    | 543..845, 547..807         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22131  | Seq. ID | OJ990605_37.9922.C12 |
| Gene No.    | 46045  | Strand  | -                    |
| Start       | 1  | End     | 2228                 |
| Name        | OJ990605_37.9922.C12.o1.gp   | Method  | AAT/GAP              |
| Start       | 1247   | End     | 1713                 |
| GI          | 3761696  | Score   | 860                  |
| Exons       | 1247..1713   |         |                      |
| GI Descrip. | 3047095 4.0e-37 (AF058826) similar to eukaryotic protein kinase domains (Pfam: pkinase.hmm, score: 72.39) [Arabidopsis thaliana] |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22131                              | Seq. ID | OJ990605_37.9922.C12 |
| Gene No. | 46045                              | Strand  | -                    |
| Start    | 1                                  | End     | 2228                 |
| Name     | OJ990605_37.9922.C12.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 1326                               | End     | 1745                 |
| GI       | none                               | Score   | 68                   |
| Exons    | 1326..1577, 1374..1616, 1665..1745 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22131  | Seq. ID | OJ990605_37.9922.C12 |
| Gene No. | 46045  | Strand  | -                    |
| Start    | 1  | End     | 2228                 |
| Name     | OJ990605_37.9922.C12.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 1332   | End     | 1892                 |
| GI       | none   | Score   | 44                   |
| Exons    | 1332..1577, 1458..1607, 1605..1748, 1605..1676, 1674..1739, 1845..1892 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22131                      | Seq. ID | OJ990605_37.9922.C12 |
| Gene No. | 46045                      | Strand  | -                    |
| Start    | 1                          | End     | 2228                 |
| Name     | OJ990605_37.9922.C12.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 1497                       | End     | 1754                 |
| GI       | none                       | Score   | 62                   |

Exons 1497..1622, 1510..1626, 1584..1742, 1617..1754

Seq. No. 22131 Seq. ID OJ990605\_37.9922.C12  
Gene No. 46045 Strand -  
Start 1 End 2228  
Name OJ990605\_37.9922.C12.o2.gp Method AAT/GAP  
Start 1807 End 2167  
GI 73943\_1.R1084 Score 640  
Exons 1807..2167  
GI Descrip. '3047095 4.0e-37 (AF058826) similar to eukaryotic protein kinase domains (Pfam: pkinase.hmm, score: 72.39) [Arabidopsis thaliana]'

Seq. No. 22132 Seq. ID OJ990605\_37.9922.C13  
Gene No. 46046 Strand +  
Start 2745 End 6649  
Name OJ990605\_37.9922.C13.o2.gs Method GENSCAN  
Start 2745 End 6562  
GI none Score .8  
Exons 2745..2797, 3100..3200, 3592..3704, 3803..4088, 4515..4579, 5769..5799, 6011..6162, 6518..6562

Seq. No. 22132 Seq. ID OJ990605\_37.9922.C13  
Gene No. 46046 Strand +  
Start 2745 End 6649  
Name OJ990605\_37.9922.C13.o2.gp Method AAT/GAP  
Start 2909 End 3846  
GI 97026\_1.R1084 Score 577  
Exons 2909..3099, 3321..3363, 3592..3704, 3806..3846  
GI Descrip. '2760323 2.0e-19 (AC002130) FlN21.8 [Arabidopsis thaliana]'

Seq. No. 22132 Seq. ID OJ990605\_37.9922.C13  
Gene No. 46046 Strand +  
Start 2745 End 6649  
Name OJ990605\_37.9922.C13.o3.gp Method AAT/GAP  
Start 4002 End 6649  
GI 29364\_1.R1084 Score 1464  
Exons 4002..4088, 4515..4579, 4800..4851, 4932..5041, 5769..5799, 6011..6162, 6331..6649  
GI Descrip. '2760323 6.0e-32 (AC002130) FlN21.8 [Arabidopsis thaliana]'

Seq. No. 22132 Seq. ID OJ990605\_37.9922.C13  
Gene No. 46047 Strand +  
Start 7646 End 7998  
Name OJ990605\_37.9922.C13.o3.gs Method GENSCAN  
Start 7646 End 7998  
GI none Score .57  
Exons 7646..7726, 7780..7998

Seq. No. 22132 Seq. ID OJ990605\_37.9922.C13  
Gene No. 46048 Strand -  
Start 490 End 1976  
Name OJ990605\_37.9922.C13.o1.gs Method GENSCAN  
Start 490 End 1976  
GI none Score .87  
Exons 490..620, 704..959, 1039..1440, 1533..1976

Seq. No. 22132  
 Gene No. 46048  
 Start 490  
 Name OJ990605\_37.9922.C13.o1.gp  
 Start 1668  
 GI none  
 Exons 1668..1884

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 1976  
 Method AAT/GAP  
 End 1884  
 Score 426

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o3.tm  
 Start 1072  
 GI none  
 Exons 1072..1338, 1073..1336

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Maize  
 End 1338  
 Score 286

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o4.tm  
 Start 3570  
 GI none  
 Exons

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Maize  
 End 6539  
 Score 203

3570..3704, 3582..3704, 3588..3680, 3591..3692, 3603..3695,  
 3611..3715, 3611..3691, 3653..3715, 3832..3969, 3833..3970,  
 3835..4104, 3846..4091, 4130..4165, 4510..4545, 4512..4550,  
 4514..4552, 4557..4580, 4557..4592, 4558..4599, 4787..4852,  
 4799..4852, 4800..4880, 4921..5034, 4930..5040, 4931..5041,  
 4931..5056, 4941..5042, 4943..5032, 6007..6165, 6010..6114,  
 6012..6125, 6025..6114, 6025..6114, 6288..6395, 6289..6396,  
 6296..6400, 6314..6397, 6398..6427, 6399..6428, 6400..6447,  
 6431..6454, 6477..6539, 6480..6533

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o5.tc  
 Start 3573  
 GI none  
 Exons

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Cress  
 End 6162  
 Score 191

3573..3683, 3582..3701, 3611..3703, 4924..5034, 4931..5032,  
 4940..5041, 6025..6162

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o5.ts  
 Start 3582  
 GI none  
 Exons

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Soybean  
 End 6186  
 Score 182

3582..3701, 3600..3692, 3603..3698, 3611..3703, 3788..3859,  
 3902..3961, 3961..4011, 4022..4090, 4535..4579, 4567..4602,  
 4800..4850, 4924..5034, 4931..5032, 4933..5031, 4934..5053,  
 4940..5032, 4943..5059, 4946..5041, 6007..6162, 6015..6113,  
 6025..6186, 6025..6153

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o4.gs

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method GENSCAN

|       |  |       |       |
|-------|--|-------|-------|
| Start | 9417   | End   | 14086 |
| GI    | none   | Score | .41   |
| Exons | 9417..9425, 10009..10180, 10505..10649, 10827..10944, 11281..13613, 13653..13764, 13790..14086 |       |       |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22132   | Seq. ID | OJ990605_37.9922.C13 |
| Gene No. | 46049   | Strand  | -                    |
| Start    | 9417  | End     | 14101                |
| Name     | OJ990605_37.9922.C13.o3.tc                        | Method  | TBLASTX:Cress        |
| Start    | 9671  | End     | 10176                |
| GI       | none  | Score   | 58                   |
| Exons    | 9671..9727, 9754..9957, 9973..10095, 10105..10176 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22132                                    | Seq. ID | OJ990605_37.9922.C13 |
| Gene No.    | 46049                                    | Strand  | -                    |
| Start       | 9417                                     | End     | 14101                |
| Name        | OJ990605_37.9922.C13.o1.np               | Method  | AAT/NAP              |
| Start       | 9721                                     | End     | 14101                |
| GI          | 2586082                                  | Score   | 4220                 |
| Exons       | 9721..11358, 11389..11630, 11694..14101  |         |                      |
| GI Descrip. | (U72725) retrofit [Oryza longistaminata] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22132   | Seq. ID | OJ990605_37.9922.C13 |
| Gene No. | 46049   | Strand  | -                    |
| Start    | 9417  | End     | 14101                |
| Name     | OJ990605_37.9922.C13.o1.ts                                      | Method  | TBLASTX:Soybean      |
| Start    | 9745  | End     | 10368                |
| GI       | none  | Score   | 57                   |
| Exons    | 9745..10368, 9773..9949, 9778..10170, 9980..10174, 10214..10366 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22132  | Seq. ID | OJ990605_37.9922.C13 |
| Gene No. | 46049  | Strand  | -                    |
| Start    | 9417   | End     | 14101                |
| Name     | OJ990605_37.9922.C13.o6.tw                       | Method  | TBLASTX:Wheat        |
| Start    | 9769   | End     | 10125                |
| GI       | none   | Score   | 48                   |
| Exons    | 9769..9960, 9878..9961, 9967..10125, 9974..10075 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22132   | Seq. ID | OJ990605_37.9922.C13 |
| Gene No. | 46049   | Strand  | -                    |
| Start    | 9417  | End     | 14101                |
| Name     | OJ990605_37.9922.C13.o1.tm                                      | Method  | TBLASTX:Maize        |
| Start    | 9772  | End     | 10380                |
| GI       | none  | Score   | 54                   |
| Exons    | 9772..9948, 9851..9949, 9973..10380, 10031..10174, 10214..10378 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22132                                    | Seq. ID | OJ990605_37.9922.C13 |
| Gene No. | 46049                                    | Strand  | -                    |
| Start    | 9417                                     | End     | 14101                |
| Name     | OJ990605_37.9922.C13.o1.tw               | Method  | TBLASTX:Wheat        |
| Start    | 10132                                    | End     | 10569                |
| GI       | none                                     | Score   | 50                   |
| Exons    | 10132..10569, 10134..10172, 10250..10564 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22132 | Seq. ID | OJ990605_37.9922.C13 |
| Gene No. | 46049 | Strand  | -                    |
| Start    | 9417  | End     | 14101                |

Name OJ990605\_37.9922.C13.o4.tc  
 Start 10435  
 GI none  
 Exons 10435..10686

Method TBLASTX:Cress  
 End 10686  
 Score 203

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o2.tm  
 Start 10504  
 GI none  
 Exons 10504..10950, 10640..10930

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Maize  
 End 10950  
 Score 112

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o3.tw  
 Start 10570  
 GI none  
 Exons 10570..10752, 10738..11082, 10774..10929, 10865..10933, 10985..11083

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Wheat  
 End 11083  
 Score 83

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o2.ts  
 Start 10747  
 GI 5509260  
 Exons 10747..11250, 10760..10924, 10964..11128  
 GI Descrip. -

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Soybean  
 End 11250  
 Score 115

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o2.tc  
 Start 10864  
 GI none  
 Exons 10864..11130, 10873..10941, 10883..11119

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Cress  
 End 11130  
 Score 70

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o8.tm  
 Start 10951  
 GI none  
 Exons 10951..11202, 10952..11203

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Maize  
 End 11203  
 Score 126

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o4.tw  
 Start 11899  
 GI none  
 Exons 11899..12255, 11915..12238

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Wheat  
 End 12255  
 Score 165

Seq. No. 22132  
 Gene No. 46049

Seq. ID OJ990605\_37.9922.C13  
 Strand -



Start 9417  
 Name OJ990605\_37.9922.C13.o1.tc  
 Start 11908  
 GI none  
 Exons 11908..12357

End 14101  
 Method TBLASTX:Cress  
 End 12357  
 Score 336

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o3.ts  
 Start 11929  
 GI none  
 Exons 11929..12360

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Soybean  
 End 12360  
 Score 260

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o5.tm  
 Start 11936  
 GI none  
 Exons 11936..12121, 11938..12252, 12274..12363

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Maize  
 End 12363  
 Score 80

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o4.ts  
 Start 12367  
 GI none  
 Exons 12367..12540, 12562..12669, 12673..12768

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Soybean  
 End 12768  
 Score 77

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o7.tm  
 Start 12853  
 GI none  
 Exons 12853..13155, 12886..13005, 12932..13150

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Maize  
 End 13155  
 Score 63

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o2.tw  
 Start 12862  
 GI none  
 Exons 12862..13251, 12868..13140, 12965..13234

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Wheat  
 End 13251  
 Score 173

Seq. No. 22132  
 Gene No. 46049  
 Start 9417  
 Name OJ990605\_37.9922.C13.o5.tw  
 Start 13438  
 GI none  
 Exons 13438..13755, 13541..13750

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101  
 Method TBLASTX:Wheat  
 End 13755  
 Score 109

Seq. No. 22132  
 Gene No. 46049  
 Start 9417

Seq. ID OJ990605\_37.9922.C13  
 Strand -  
 End 14101

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990605_37.9922.C13.o6.tm                             | Method | TBLASTX:Maize |
| Start | 13585  | End    | 14005         |
| GI    | none   | Score  | 118           |
| Exons | 13585..13785, 13589..13759, 13835..13888, 13925..14005 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22133                      | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46050                      | Strand  | +                    |
| Start    | 97                         | End     | 255                  |
| Name     | OJ990605_37.9922.C14.o1.gs | Method  | GENSCAN              |
| Start    | 97                         | End     | 255                  |
| GI       | none                       | Score   | .99                  |
| Exons    | 97..255                    |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22133                              | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46051                              | Strand  | -                    |
| Start    | 2312                               | End     | 3111                 |
| Name     | OJ990605_37.9922.C14.o1.gp         | Method  | AAT/GAP              |
| Start    | 2312                               | End     | 3111                 |
| GI       | none                               | Score   | 816                  |
| Exons    | 2312..2639, 2870..2928, 3071..3111 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22133   | Seq. ID | OJ990605_37.9922.C14 |
| Gene No.    | 46052   | Strand  | -                    |
| Start       | 3121  | End     | 4108                 |
| Name        | OJ990605_37.9922.C14.o2.gp  | Method  | AAT/GAP              |
| Start       | 3121  | End     | 4108                 |
| GI          | 7375_1.R1084  | Score   | 1107                 |
| Exons       | 3121..3156, 3413..3458, 3566..4108  |         |                      |
| GI Descrip. | '4049342/emb CAA22567.1  3.0e-14 (AL034567) adenylate translocator (brittle-1)-like protein [Arabidopsis thaliana]' |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22133   | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46053   | Strand  | -                    |
| Start    | 8370  | End     | 18873                |
| Name     | OJ990605_37.9922.C14.o4.gs  | Method  | GENSCAN              |
| Start    | 8370  | End     | 18873                |
| GI       | none  | Score   | .48                  |
| Exons    | 8370..8595, 8746..8771, 9238..9322, 9648..9791, 9865..9923, 9992..10298, 10822..10903, 10980..11113, 11198..11291, 11362..11638, 11747..11899, 12051..13285, 13821..14882, 15058..15987, 16364..16549, 16676..16795, 18354..18503, 18549..18873 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22133   | Seq. ID | OJ990605_37.9922.C14 |
| Gene No.    | 46053   | Strand  | -                    |
| Start       | 8370  | End     | 18873                |
| Name        | OJ990605_37.9922.C14.o1.np  | Method  | AAT/NAP              |
| Start       | 12003   | End     | 16174                |
| GI          | 6815072   | Score   | 3469                 |
| Exons       | 12003..14213, 14610..14897, 14984..15682, 15791..16174  |         |                      |
| GI Descrip. | (AP001080) Similar to Arabidopsis thaliana chromosome II BAC T13P21; hypothetical protein (AC006067) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22133                      | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46054                      | Strand  | -                    |
| Start    | 19927                      | End     | 20718                |
| Name     | OJ990605_37.9922.C14.o5.gs | Method  | GENSCAN              |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 19927                                    | End   | 20718 |
| GI    | none                                     | Score | .59   |
| Exons | 19927..20071, 20322..20361, 20409..20718 |       |       |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22133                              | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46055                              | Strand  | -                    |
| Start    | 21569                              | End     | 21897                |
| Name     | OJ990605_37.9922.C14.o5.tm         | Method  | TBLASTX:Maize        |
| Start    | 7301                               | End     | 7561                 |
| GI       | none                               | Score   | 209                  |
| Exons    | 7301..7489, 7306..7452, 7496..7561 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22133                      | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46055                      | Strand  | -                    |
| Start    | 21569                      | End     | 21897                |
| Name     | OJ990605_37.9922.C14.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 12096                      | End     | 12278                |
| GI       | none                       | Score   | 108                  |
| Exons    | 12096..12278, 12100..12276 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22133  | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46055  | Strand  | -                    |
| Start    | 21569  | End     | 21897                |
| Name     | OJ990605_37.9922.C14.o3.tm                             | Method  | TBLASTX:Maize        |
| Start    | 12202  | End     | 12524                |
| GI       | none   | Score   | 44                   |
| Exons    | 12202..12282, 12204..12293, 12303..12524, 12304..12522 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22133                      | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46055                      | Strand  | -                    |
| Start    | 21569                      | End     | 21897                |
| Name     | OJ990605_37.9922.C14.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 12270                      | End     | 12527                |
| GI       | none                       | Score   | 100                  |
| Exons    | 12270..12527, 12328..12516 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22133                                    | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46055                                    | Strand  | -                    |
| Start    | 21569                                    | End     | 21897                |
| Name     | OJ990605_37.9922.C14.o2.tm               | Method  | TBLASTX:Maize        |
| Start    | 12831                                    | End     | 13199                |
| GI       | none                                     | Score   | 126                  |
| Exons    | 12831..13199, 12955..13182, 13101..13199 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22133  | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46055  | Strand  | -                    |
| Start    | 21569  | End     | 21897                |
| Name     | OJ990605_37.9922.C14.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 14827  | End     | 15293                |
| GI       | none   | Score   | 69                   |
| Exons    | 14827..14910, 14828..14911, 14939..15097, 15101..15292, 15102..15293 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22133                      | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46055                      | Strand  | -                    |
| Start    | 21569                      | End     | 21897                |
| Name     | OJ990605_37.9922.C14.o1.tw | Method  | TBLASTX:Wheat        |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 14976  | End   | 15337 |
| GI    | none   | Score | 103   |
| Exons | 14976..15095, 15017..15115, 15113..15337, 15114..15284, 15122..15295 |       |       |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22133  | Seq. ID | OJ990605_37.9922.C14 |
| Gene No. | 46055  | Strand  | -                    |
| Start    | 21569  | End     | 21897                |
| Name     | OJ990605_37.9922.C14.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 15356  | End     | 16048                |
| GI       | none   | Score   | 76                   |
| Exons    | 15356..15505, 15530..15880, 15534..15599, 15947..15979, 15989..16048 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22133  | Seq. ID | OJ990605_37.9922.C14 |
| Gene No.    | 46055  | Strand  | -                    |
| Start       | 21569  | End     | 21897                |
| Name        | OJ990605_37.9922.C14.o2.np   | Method  | AAT/NAP              |
| Start       | 21569  | End     | 21897                |
| GI          | 2864612  | Score   | 91                   |
| Exons       | 21569..21668, 21824..21897   |         |                      |
| GI Descrip. | (AL021811) L-ascorbate peroxidase - like protein [Arabidopsis thaliana] gi 4049334 emb CAA22559.1  (AL034567) L-ascorbate peroxidase-like protein [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22134  | Seq. ID | OJ990605_37.9922.C17 |
| Gene No.    | 46056  | Strand  | -                    |
| Start       | 1  | End     | 607                  |
| Name        | OJ990605_37.9922.C17.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 607                  |
| GI          | 2498930  | Score   | 705                  |
| Exons       | 1..377, 544..607   |         |                      |
| GI Descrip. | DORSAL-VENTRAL PATTERNING PROTEIN SOG (SHORT GASTRULATION PROTEIN) gi 1203794 (U18774) Sog [Drosophila melanogaster] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22134                      | Seq. ID | OJ990605_37.9922.C17 |
| Gene No. | 46056                      | Strand  | -                    |
| Start    | 1                          | End     | 607                  |
| Name     | OJ990605_37.9922.C17.o1.gs | Method  | GENSCAN              |
| Start    | 75                         | End     | 603                  |
| GI       | none                       | Score   | .62                  |
| Exons    | 75..377, 544..603          |         |                      |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46057   | Strand  | +                   |
| Start       | 7329  | End     | 7786                |
| Name        | OJ990605_36.9919.C1.o4.gp   | Method  | AAT/GAP             |
| Start       | 7329  | End     | 7786                |
| GI          | 2231_2.R1084  | Score   | 844                 |
| Exons       | 7329..7786  |         |                     |
| GI Descrip. | '11957/emb X15901 CHOSXX 1.0e-145 Rice complete chloroplast genome' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22135                     | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46058                     | Strand  | +                   |
| Start    | 7882                      | End     | 8770                |
| Name     | OJ990605_36.9919.C1.o5.gp | Method  | AAT/GAP             |

|             |  |       |      |
|-------------|--|-------|------|
| Start       | 7882   | End   | 8770 |
| GI          | 7587_1.R1084   | Score | 1667 |
| Exons       | 7882..8770   |       |      |
| GI Descrip. | '131283/sp P12158 PSBC_ORYSA 2.0e-85 PHOTOSYSTEM II 44 KD REACTION CENTER PROTEIN (P6 PROTEIN) (CP43)<br>>gi_72710_pir_F2RZ44 photosystem II chlorophyll a-binding protein psbC - rice chloroplast >gi_11965_emb_CAA34014_ (X15901) PSII 43kDa protein [Oryza sativa]' |       |      |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46059   | Strand  | +                   |
| Start       | 8833  | End     | 10111               |
| Name        | OJ990605_36.9919.C1.o7.gp   | Method  | AAT/GAP             |
| Start       | 8833  | End     | 10111               |
| GI          | 306_9.R1084   | Score   | 239                 |
| Exons       | 8833..8860, 9937..10111   |         |                     |
| GI Descrip. | '287391/dbj D13111 RICMT15 1.0e-178 Oryza sativa mitochondrial rpoB pseudogene' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46060  | Strand  | +                   |
| Start       | 13853  | End     | 13963               |
| Name        | OJ990605_36.9919.C1.o8.gp  | Method  | AAT/GAP             |
| Start       | 13853  | End     | 13963               |
| GI          | 1036999  | Score   | 189                 |
| Exons       | 13853..13963   |         |                     |
| GI Descrip. | 11957/emb X15901 CHOSXX 2.0e-52 Rice complete chloroplast genome |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46061  | Strand  | +                   |
| Start       | 14037  | End     | 14182               |
| Name        | OJ990605_36.9919.C1.o9.gp  | Method  | AAT/GAP             |
| Start       | 14037  | End     | 14182               |
| GI          | LIB3432-021-P1-K1-A3   | Score   | 213                 |
| Exons       | 14037..14182   |         |                     |
| GI Descrip. | '11957/emb X15901 CHOSXX 1.0e-52 Rice complete chloroplast genome' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46062  | Strand  | +                   |
| Start       | 27670  | End     | 28212               |
| Name        | OJ990605_36.9919.C1.o12.gp   | Method  | AAT/GAP             |
| Start       | 27670  | End     | 28212               |
| GI          | 42732_1.R1084  | Score   | 1070                |
| Exons       | 27670..28212   |         |                     |
| GI Descrip. | '114657/sp P12083 ATPI_ORYSA 3.0e-76 ATP SYNTHASE A CHAIN PRECURSOR (SUBUNIT IV) >gi_67926_pir_LWRZ6 H+-transporting ATP synthase (EC 3.6.1.34) chain a - rice chloroplast<br>>gi_11975_emb_CAA33990_ (X15901) ATPase a subunit [Oryza sativa]<br>>gi_226693_prf_1603356U ATPase a [Oryza sativa]' |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46063                      | Strand  | +                   |
| Start    | 28253                      | End     | 28623               |
| Name     | OJ990605_36.9919.C1.o13.gp | Method  | AAT/GAP             |
| Start    | 28253                      | End     | 28623               |
| GI       | LIB3477-011-P1-K1-C10      | Score   | 734                 |

Exons 28253..28623  
 GI Descrip. '114657/sp|P12083|ATPI\_ORYSA 2.0e-34 ATP SYNTHASE A CHAIN  
 PRECURSOR (SUBUNIT IV) >gi\_67926\_pir\_LWRZ6 H+-transporting ATP  
 synthase (EC 3.6.1.34) chain a - rice chloroplast  
 >gi\_11975\_emb\_CAA33990 (X15901) ATPase a subunit [Oryza sativa]  
 >gi\_226693\_prf\_1603356U ATPase a [Oryza sativa]'

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46064                      | Strand  | +                   |
| Start    | 31522                      | End     | 32068               |
| Name     | OJ990605_36.9919.C1.o16.gp | Method  | AAT/GAP             |
| Start    | 31522                      | End     | 32068               |
| GI       | 5005311                    | Score   | 1047                |

Exons 31522..32068  
 GI Descrip. 114521/sp|P12084|ATPA\_ORYSA 1.0e-78 ATP SYNTHASE ALPHA CHAIN  
 >gi\_67827\_pir\_PWRZA H+-transporting ATP synthase (EC 3.6.1.34)  
 alpha chain - rice chloroplast >gi\_11979\_emb\_CAA33993 (X15901)  
 ATPase alpha subunit [Oryza sativa] >gi\_226696\_prf\_1603356X  
 ATPase alpha [Oryza sativa]

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46065                      | Strand  | +                   |
| Start    | 32647                      | End     | 33063               |
| Name     | OJ990605_36.9919.C1.o17.gp | Method  | AAT/GAP             |
| Start    | 32647                      | End     | 33063               |
| GI       | LIB3431-040-P1-K2-C1       | Score   | 734                 |

Exons 32647..33063  
 GI Descrip. '114521/sp|P12084|ATPA\_ORYSA 6.0e-53 ATP SYNTHASE ALPHA CHAIN  
 >gi\_67827\_pir\_PWRZA H+-transporting ATP synthase (EC 3.6.1.34)  
 alpha chain - rice chloroplast >gi\_11979\_emb\_CAA33993 (X15901)  
 ATPase alpha subunit [Oryza sativa] >gi\_226696\_prf\_1603356X  
 ATPase alpha [Oryza sativa]'

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46066                      | Strand  | +                   |
| Start    | 38676                      | End     | 38934               |
| Name     | OJ990605_36.9919.C1.o19.gp | Method  | AAT/GAP             |
| Start    | 38676                      | End     | 38934               |
| GI       | uC-osflm202088b07a1        | Score   | 514                 |

Exons 38676..38934  
 GI Descrip. '11957/emb|X15901|CHOSXX 2.0e-52 Rice complete chloroplast  
 genome'

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46067                      | Strand  | +                   |
| Start    | 44460                      | End     | 44521               |
| Name     | OJ990605_36.9919.C1.o21.gp | Method  | AAT/GAP             |
| Start    | 44460                      | End     | 44521               |
| GI       | 56420_1.R1084              | Score   | 88                  |

Exons 44460..44521  
 GI Descrip. '2979562 2.0e-16 (AC003680) unknown protein [Arabidopsis  
 thaliana] >gi\_3386623 (AC004665) unknown protein [Arabidopsis  
 thaliana].'

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46068 | Strand  | +                   |
| Start    | 51357 | End     | 52086               |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Name        | OJ990605_36.9919.C1.o24.gp  | Method  | AAT/GAP             |
| Start       | 51357   | End     | 52086               |
| GI          | 24824_1.R1084   | Score   | 1379                |
| Exons       | 51357..52086  |         |                     |
| GI Descrip. | '476752 5.0e-87 (L24073) rubisco large subunit [Oryza sativa]<br>>gi_1583954_prf_2121489A<br>RuBisCO:SUBUNIT=large:ISOTYPE=truncated [Oryza sativa]'  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46069   | Strand  | +                   |
| Start       | 52183   | End     | 53008               |
| Name        | OJ990605_36.9919.C1.o25.gp  | Method  | AAT/GAP             |
| Start       | 52183   | End     | 53008               |
| GI          | 14384_1.R1084   | Score   | 1358                |
| Exons       | 52183..52894, 52980..53008  |         |                     |
| GI Descrip. | '5881726/dbj BAA84417.1  3.0e-24 (AP000423) RNA polymerase alpha subunit [Arabidopsis thaliana]'  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46070   | Strand  | +                   |
| Start       | 54824   | End     | 55447               |
| Name        | OJ990605_36.9919.C1.o26.gp  | Method  | AAT/GAP             |
| Start       | 54824   | End     | 55447               |
| GI          | 7528_2.R1084  | Score   | 1143                |
| Exons       | 54824..55447  |         |                     |
| GI Descrip. | '140291/sp P12206 YCF4 ORYSA 7.0e-68 HYPOTHETICAL 21.5 KD PROTEIN (ORF 185) >gi_82541_pir_S05116 hypothetical protein 185 - rice chloroplast >gi_11997_emb_CAA33958_ (X15901) ORF185 [Oryza sativa] >gi_226618_prf_1603356AQ ORF 185 [Oryza sativa]'  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46071   | Strand  | +                   |
| Start       | 56858   | End     | 57299               |
| Name        | OJ990605_36.9919.C1.o28.gp  | Method  | AAT/GAP             |
| Start       | 56858   | End     | 57299               |
| GI          | uC-osflm202092b08b1   | Score   | 831                 |
| Exons       | 56858..57299  |         |                     |
| GI Descrip. | '118048/sp P07888 CYF ORYSA 5.0e-65 APOCYTOCHROME F PRECURSOR >gi_65615_pir_CFRZ plastoquinol--plastocyanin reductase (EC 1.10.99.1) cytochrome f precursor - rice chloroplast >gi_12000_emb_CAA33961_ (X15901) cytochrome f [Oryza sativa] >gi_226621_prf_1603356AU cytochrome f [Oryza sativa]' |         |                     |
|             |   |         |                     |
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46072   | Strand  | +                   |
| Start       | 61864   | End     | 62386               |
| Name        | OJ990605_36.9919.C1.o29.gp  | Method  | AAT/GAP             |
| Start       | 61864   | End     | 62386               |
| GI          | uC-osflm202104g03b1   | Score   | 1026                |
| Exons       | 61864..62386  |         |                     |
| GI Descrip. | '131211/sp P19443 PSAJ_MAIZE 6.0e-10 PHOTOSYSTEM I REACTION CENTRE SUBUNIT IX (PSI-J) >gi_1363533_pir_S58571 photosystem I protein psaJ - maize chloroplast >gi_552734 (J04502) ORF42 [Zea mays] >gi_902241_emb_CAA60305_ (X86563) psaJ [Zea mays]'   |         |                     |
|             |   |         |                     |
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46073   | Strand  | +                   |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 65930  | End    | 66058   |
| Name        | OJ990605_36.9919.C1.o31.gp   | Method | AAT/GAP |
| Start       | 65930  | End    | 66058   |
| GI          | LIB3432-057-P1-K1-A8   | Score  | 169     |
| Exons       | 65930..66058   |        |         |
| GI Descrip. | '11957/emb X15901 CHOSXX 7.0e-52 Rice complete chloroplast genome' |        |         |

  

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46074   | Strand  | +                   |
| Start       | 66608   | End     | 67160               |
| Name        | OJ990605_36.9919.C1.o32.gp  | Method  | AAT/GAP             |
| Start       | 66608   | End     | 67160               |
| GI          | 2896_1.R1084  | Score   | 1023                |
| Exons       | 66608..67160  |         |                     |
| GI Descrip. | '131271/sp P12157 PSBB_ORYSA 2.0e-88 PHOTOSYSTEM II P680 CHLOROPHYLL A APOPROTEIN (CP-47 PROTEIN) >gi_72705_pir_QJRZ6A photosystem II chlorophyll a-binding protein psbB - rice chloroplast >gi_12013_emb_CAA33973_ (X15901) PSII 47kDa protein [Oryza sativa] >gi_226634_prf_1603356BH photosystem II 47kD protein [Oryza sativa]' |         |                     |

  

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46075   | Strand  | -                   |
| Start       | 943   | End     | 1211                |
| Name        | OJ990605_36.9919.C1.o1.gp   | Method  | AAT/GAP             |
| Start       | 943   | End     | 1211                |
| GI          | 40596_1.R1084   | Score   | 450                 |
| Exons       | 943..1211   |         |                     |
| GI Descrip. | '11957/emb X15901 CHOSXX 1.0e-104 Rice complete chloroplast genome' |         |                     |

  

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46076   | Strand  | -                   |
| Start       | 1805  | End     | 3051                |
| Name        | OJ990605_36.9919.C1.o2.gp   | Method  | AAT/GAP             |
| Start       | 1805  | End     | 3051                |
| GI          | uC-osflcyp086a01a1  | Score   | 831                 |
| Exons       | 1805..1995, 2806..3051  |         |                     |
| GI Descrip. | '133806/sp P25875 RR16_HORVU 5.0e-37 CHLOROPLAST 30S RIBOSOMAL PROTEIN S16 >gi_282999_pir_S28766 ribosomal protein S16 - barley chloroplast >gi_11603_emb_CAA36973_ (X52765) ribosomal protein rps16 [Hordeum vulgare]' |         |                     |

  

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46077   | Strand  | -                   |
| Start       | 3132  | End     | 3582                |
| Name        | OJ990605_36.9919.C1.o3.gp   | Method  | AAT/GAP             |
| Start       | 3132  | End     | 3582                |
| GI          | uC-osflcyp086a01b1  | Score   | 902                 |
| Exons       | 3132..3582  |         |                     |
| GI Descrip. | '11957/emb X15901 CHOSXX 1.0e-135 Rice complete chloroplast genome' |         |                     |

  

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46078 | Strand  | -                   |
| Start    | 9088  | End     | 9546                |



|             |  |         |                     |
|-------------|--|---------|---------------------|
| Name        | OJ990605_36.9919.C1.o6.gp  | Method  | AAT/GAP             |
| Start       | 9088   | End     | 9546                |
| GI          | 45273_1.R1084  | Score   | 850                 |
| Exons       | 9088..9546   |         |                     |
| GI Descrip. | '1022811 4.0e-21 (U37703) ORF 62 [Hordeum vulgare]'  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46079  | Strand  | -                   |
| Start       | 16266  | End     | 16396               |
| Name        | OJ990605_36.9919.C1.o10.gp   | Method  | AAT/GAP             |
| Start       | 16266  | End     | 16396               |
| GI          | 5607624  | Score   | 215                 |
| Exons       | 16266..16396   |         |                     |
| GI Descrip. | 287391/dbj D13111 RICMT15 1.0e-178 Oryza sativa mitochondrial rpoB pseudogene  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46080  | Strand  | -                   |
| Start       | 23618  | End     | 23703               |
| Name        | OJ990605_36.9919.C1.o11.gp   | Method  | AAT/GAP             |
| Start       | 23618  | End     | 23703               |
| GI          | LIB3432-013-P1-K1-E3   | Score   | 133                 |
| Exons       | 23618..23703   |         |                     |
| GI Descrip. | '133446/sp P12093 RPOD_ORYSA 3.0e-09 DNA-DIRECTED RNA POLYMERASE BETA" CHAIN >gi_66986_pir_RNRZC2 DNA-directed RNA polymerase (EC 2.7.7.6) beta''-2 chain - rice chloroplast >gi_11973_emb_CAA33988_ (X15901) RNA polymerase beta'' subunit-2 [Oryza sativa]'                      |         |                     |
|             |  |         |                     |
| Seq. No.    | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46081  | Strand  | -                   |
| Start       | 29288  | End     | 30328               |
| Name        | OJ990605_36.9919.C1.o14.gp   | Method  | AAT/GAP             |
| Start       | 29288  | End     | 30328               |
| GI          | 2721_1.R1084   | Score   | 1986                |
| Exons       | 29288..30328   |         |                     |
| GI Descrip. | '114622/sp P12087 ATPF_ORYSA 1.0e-20 ATP SYNTHASE B CHAIN (SUBUNIT I) >gi_67929_pir_LWRZ1 H+-transporting ATP synthase (EC 3.6.1.34) chain I - rice chloroplast >gi_669080_emb_CAA33992_ (X15901) ATPase I subunit [Oryza sativa] >gi_226695_prf_1603356W ATPase I [Oryza sativa]' |         |                     |
|             |  |         |                     |
| Seq. No.    | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46082  | Strand  | -                   |
| Start       | 30366  | End     | 30911               |
| Name        | OJ990605_36.9919.C1.o15.gp   | Method  | AAT/GAP             |
| Start       | 30366  | End     | 30911               |
| GI          | 2135_1.R1084   | Score   | 1072                |
| Exons       | 30366..30911   |         |                     |
| GI Descrip. | '11957/emb X15901 CHOSXX 1.0e-159 Rice complete chloroplast genome'  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46083  | Strand  | -                   |
| Start       | 35300  | End     | 35730               |
| Name        | OJ990605_36.9919.C1.o18.gp   | Method  | AAT/GAP             |
| Start       | 35300  | End     | 35730               |

GI uC-osflcyp021g10b1 Score 766  
 Exons 35300..35730  
 GI Descrip. '131148/sp|P12156|PSAB\_ORYSA 6.0e-59 PHOTOSYSTEM I P700  
 CHLOROPHYLL A APOPROTEIN A2 >gi\_72674\_pir\_A2RZP7 photosystem I  
 P700 apoprotein A2 - rice chloroplast >gi\_11981\_emb\_CAA33995\_  
 (X15901) PSI P700 apoprotein A2 [Oryza sativa]  
 >gi\_226604\_prf\_1603356AA photosystem I P700 apoprotein A2  
 [Oryza sativa]'

Seq. No. 22135 Seq. ID OJ990605\_36.9919.C1  
 Gene No. 46084 Strand -  
 Start 42612 End 42727  
 Name OJ990605\_36.9919.C1.o20.gp Method AAT/GAP  
 Start 42612 End 42727  
 GI LIB3431-013-P1-K1-B3 Score 181  
 Exons 42612..42727  
 GI Descrip. '6002093/emb|X84149.1|CHZLRPS4G 9.0e-21 Zizania latifolia  
 cloroplast rps4 gene for ribosomal protein S4'

Seq. No. 22135 Seq. ID OJ990605\_36.9919.C1  
 Gene No. 46085 Strand -  
 Start 46564 End 47533  
 Name OJ990605\_36.9919.C1.o22.gp Method AAT/GAP  
 Start 46564 End 47533  
 GI 2409\_1.R1084 Score 1911  
 Exons 46564..47533  
 GI Descrip. '128690/sp|P12126|NU3C\_ORYSA 2.0e-56 NADH-PLASTOQUINONE  
 OXIDOREDUCTASE CHAIN 3, CHLOROPLAST >gi\_66161\_pir\_DERZN3 NADH  
 dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 3 - rice  
 chloroplast >gi\_11989\_emb\_CAA34001\_ (X15901) ndhC; NADH  
 dehydrogenase ND3 [Oryza sativa] >gi\_226610\_prf\_1603356AG NADH  
 dehydrogenase ND3 [Oryza sativa]'

Seq. No. 22135 Seq. ID OJ990605\_36.9919.C1  
 Gene No. 46086 Strand -  
 Start 50376 End 50893  
 Name OJ990605\_36.9919.C1.o23.gp Method AAT/GAP  
 Start 50376 End 50893  
 GI uC-osflM202083h12b1 Score 953  
 Exons 50376..50893  
 GI Descrip. '552857 3.0e-25 (M31464) atpB gene product [Oryza sativa]'

Seq. No. 22135 Seq. ID OJ990605\_36.9919.C1  
 Gene No. 46087 Strand -  
 Start 55451 End 55988  
 Name OJ990605\_36.9919.C1.o27.gp Method AAT/GAP  
 Start 55451 End 55988  
 GI 2653\_1.R1084 Score 1052  
 Exons 55451..55988  
 GI Descrip. '11998/emb|CAA33959| 5.0e-35 (X15901) ORF85 [Oryza sativa]  
 >gi\_226619\_prf\_1603356AR ORF 85A [Oryza sativa]'

Seq. No. 22135 Seq. ID OJ990605\_36.9919.C1  
 Gene No. 46088 Strand -  
 Start 64702 End 67526  
 Name OJ990605\_36.9919.C1.o31.ts Method TBLASTX:Soybean  
 Start 3 End 495

GI none Score 76  
Exons 3..146, 5..139, 153..227, 160..213, 216..347, 218..349, 242..352, 364..495

Seq. No. 22135 Seq. ID OJ990605\_36.9919.C1  
Gene No. 46088 Strand -  
Start 64702 End 67526  
Name OJ990605\_36.9919.C1.o50.tc Method TBLASTX:Cress  
Start 81 End 495  
GI none Score 83  
Exons 81..221, 82..207, 195..347, 223..345, 242..352, 243..350, 380..493, 381..494, 382..495, 382..495

Seq. No. 22135 Seq. ID OJ990605\_36.9919.C1  
Gene No. 46088 Strand -  
Start 64702 End 67526  
Name OJ990605\_36.9919.C1.o48.tc Method TBLASTX:Cress  
Start 683 End 1230  
GI none Score 49  
Exons 683..733, 688..735, 695..736, 737..778, 737..775, 738..782, 748..783, 876..959, 877..963, 883..975, 887..1000, 982..1026, 1051..1092, 1052..1090, 1066..1092, 1079..1222, 1081..1230, 1081..1221

Seq. No. 22135 Seq. ID OJ990605\_36.9919.C1  
Gene No. 46088 Strand -  
Start 64702 End 67526  
Name OJ990605\_36.9919.C1.o44.tm Method TBLASTX:Maize  
Start 935 End 1195  
GI none Score 122  
Exons 935..958, 947..1024, 955..1050, 995..1195, 1015..1194

Seq. No. 22135 Seq. ID OJ990605\_36.9919.C1  
Gene No. 46088 Strand -  
Start 64702 End 67526  
Name OJ990605\_36.9919.C1.o64.tm Method TBLASTX:Maize  
Start 1196 End 1570  
GI none Score 68  
Exons 1196..1237, 1197..1238, 1198..1239, 1235..1276, 1236..1301, 1290..1328, 1293..1331, 1304..1342, 1315..1392, 1316..1396, 1332..1391, 1333..1395, 1390..1434, 1414..1512, 1424..1519, 1425..1520, 1461..1520, 1517..1570

Seq. No. 22135 Seq. ID OJ990605\_36.9919.C1  
Gene No. 46088 Strand -  
Start 64702 End 67526  
Name OJ990605\_36.9919.C1.o25.ts Method TBLASTX:Soybean  
Start 1799 End 56358  
GI none Score 211  
Exons 1799..1999, 1800..1994, 1816..1998, 2772..2858, 2780..2860, 2790..2873, 2797..2874, 2806..2877, 2898..2918, 2899..2922, 53867..54088, 53926..54045, 54548..54685, 54550..54639, 54560..54646, 54561..54647, 55007..55168, 55012..55152, 55156..55359, 55164..55205, 55190..55405, 55190..55402, 55425..55487, 55428..55487, 55436..55492, 55514..55573, 55514..55591, 55887..55955, 55899..55958, 55901..55963, 55980..56354, 55984..56358, 55990..56094, 56010..56357,

56173..56358

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22135                              | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                              | Strand  | -                   |
| Start    | 64702                              | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o53.tc         | Method  | TBLASTX:Cress       |
| Start    | 1874                               | End     | 2061                |
| GI       | none                               | Score   | 204                 |
| Exons    | 1874..2053, 1875..2060, 1966..2061 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o24.tm   | Method  | TBLASTX:Maize       |
| Start    | 2402   | End     | 3031                |
| GI       | none   | Score   | 113                 |
| Exons    | 2402..2497, 2403..2486, 2489..2632, 2509..2676, 2542..2679, 2556..2690, 2652..2930, 2664..2924, 2678..2932, 2917..2955, 2920..2952, 2953..3003, 2954..2986, 2981..3028, 2987..3031 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o29.tw   | Method  | TBLASTX:Wheat       |
| Start    | 3817   | End     | 4192                |
| GI       | none   | Score   | 154                 |
| Exons    | 3817..4005, 3906..4004, 3908..4009, 4114..4188, 4118..4192, 4118..4189 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o13.tm   | Method  | TBLASTX:Maize       |
| Start    | 4102   | End     | 4668                |
| GI       | none   | Score   | 198                 |
| Exons    | 4102..4230, 4109..4255, 4110..4259, 4248..4562, 4253..4561, 4375..4566, 4565..4630, 4566..4628, 4568..4630, 4616..4666, 4616..4666, 4627..4668 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o2.tc  | Method  | TBLASTX:Cress       |
| Start    | 4238   | End     | 67526               |
| GI       | none   | Score   | 78                  |
| Exons    | 4238..4411, 7182..8018, 7182..7469, 7186..7677, 7524..8120, 7528..8112, 7726..8622, 7733..8623, 67365..67526 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o2.tw  | Method  | TBLASTX:Wheat       |
| Start    | 4238   | End     | 8358                |
| GI       | none   | Score   | 75                  |
| Exons    | 4238..4411, 7725..8018, 7725..8120, 7726..8112, 7726..8259, 7733..8260, 8160..8264, 8166..8279, 8179..8280, 8223..8357, 8239..8358, 8240..8356 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 4238   | End     | 67526               |
| GI       | none   | Score   | 76                  |
| Exons    | 4238..4411, 7162..8106, 7162..7677, 7511..7678, 7524..8120, 7718..8638, 7733..8656, 67365..67526 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o37.ts   | Method  | TBLASTX:Soybean     |
| Start    | 4412   | End     | 5149                |
| GI       | none   | Score   | 154                 |
| Exons    | 4412..4531, 4414..4515, 4883..5011, 4884..5012, 4884..5009, 4885..5013, 5054..5149 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o59.tm   | Method  | TBLASTX:Maize       |
| Start    | 4669   | End     | 4876                |
| GI       | none   | Score   | 86                  |
| Exons    | 4669..4737, 4671..4739, 4728..4784, 4738..4803, 4739..4795, 4764..4874, 4769..4876, 4778..4876 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o57.tc                                 | Method  | TBLASTX:Cress       |
| Start    | 4869   | End     | 5149                |
| GI       | none   | Score   | 215                 |
| Exons    | 4869..5012, 4882..5025, 4882..5025, 5123..5149, 5123..5149 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o38.tm   | Method  | TBLASTX:Maize       |
| Start    | 5221   | End     | 5649                |
| GI       | none   | Score   | 95                  |
| Exons    | 5221..5286, 5222..5287, 5223..5288, 5272..5331, 5273..5329, 5277..5351, 5278..5382, 5357..5386, 5387..5503, 5388..5525, 5405..5527, 5483..5545, 5483..5545, 5552..5647, 5552..5632, 5554..5649, 5554..5649 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o20.tw   | Method  | TBLASTX:Wheat       |
| Start    | 5326   | End     | 5881                |
| GI       | none   | Score   | 57                  |
| Exons    | 5326..5385, 5357..5386, 5375..5467, 5380..5466, 5388..5468, 5388..5471, 5442..5513, 5460..5501, 5462..5551, 5462..5512, 5471..5545, 5487..5558, 5550..5675, 5552..5665, 5644..5838, 5662..5802, 5691..5813, 5762..5848, 5807..5881 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o60.tm   | Method  | TBLASTX:Maize       |
| Start    | 5651   | End     | 5891                |
| GI       | none   | Score   | 181                 |
| Exons    | 5651..5788, 5662..5787, 5662..5790, 5792..5836, 5795..5848, 5797..5838, 5826..5891, 5828..5881 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o25.tw   | Method  | TBLASTX:Wheat       |
| Start    | 5882   | End     | 6255                |
| GI       | none   | Score   | 44                  |
| Exons    | 5882..5914, 5885..5932, 5890..5931, 5904..5933, 5924..5980, 5934..5981, 5937..5981, 5938..5982, 5939..5983, 5970..5996, 5975..6010, 5981..6103, 5982..6107, 5983..6108, 5983..6108, 6106..6123, 6135..6251, 6135..6212, 6139..6255, 6139..6255 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22135                              | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                              | Strand  | -                   |
| Start    | 64702                              | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o7.ts          | Method  | TBLASTX:Soybean     |
| Start    | 6133                               | End     | 6955                |
| GI       | none                               | Score   | 1367                |
| Exons    | 6133..6954, 6135..6953, 6137..6955 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o16.tc                     | Method  | TBLASTX:Cress       |
| Start    | 6195   | End     | 6567                |
| GI       | none   | Score   | 447                 |
| Exons    | 6195..6566, 6195..6566, 6196..6567, 6196..6567 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o21.tm | Method  | TBLASTX:Maize       |
| Start    | 6507                       | End     | 6929                |
| GI       | none                       | Score   | 671                 |
| Exons    | 6507..6929, 6508..6927     |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o21.tc | Method  | TBLASTX:Cress       |
| Start    | 6651                       | End     | 6980                |
| GI       | none                       | Score   | 521                 |
| Exons    | 6651..6980, 6655..6978     |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22135                     | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                     | Strand  | -                   |
| Start    | 64702                     | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o8.tw | Method  | TBLASTX:Wheat       |

|       |  |       |      |
|-------|--|-------|------|
| Start | 6721   | End   | 7164 |
| GI    | none   | Score | 43   |
| Exons | 6721..6756, 6741..7163, 6742..7164, 6748..7164 |       |      |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22135                              | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                              | Strand  | -                   |
| Start    | 64702                              | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o14.tm         | Method  | TBLASTX:Maize       |
| Start    | 7223                               | End     | 7674                |
| GI       | none                               | Score   | 754                 |
| Exons    | 7223..7474, 7225..7674, 7226..7672 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o14.tw   | Method  | TBLASTX:Wheat       |
| Start    | 7326   | End     | 7725                |
| GI       | none   | Score   | 578                 |
| Exons    | 7326..7469, 7327..7668, 7328..7723, 7511..7672, 7524..7724, 7528..7725 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o15.tm                                 | Method  | TBLASTX:Maize       |
| Start    | 7710   | End     | 8196                |
| GI       | none   | Score   | 626                 |
| Exons    | 7710..8117, 7711..8106, 7715..8194, 7733..8194, 8041..8196 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o20.tm   | Method  | TBLASTX:Maize       |
| Start    | 8196   | End     | 67526               |
| GI       | none   | Score   | 668                 |
| Exons    | 8196..8630, 8197..8616, 8197..8631, 8198..8632, 8627..8659, 8628..8657, 67365..67526 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o21.tw   | Method  | TBLASTX:Wheat       |
| Start    | 8359   | End     | 67526               |
| GI       | none   | Score   | 390                 |
| Exons    | 8359..8616, 8361..8657, 8361..8657, 8628..8711, 8650..8721, 8651..8722, 67365..67526 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o29.ts   | Method  | TBLASTX:Soybean     |
| Start    | 8849   | End     | 9426                |
| GI       | none   | Score   | 76                  |
| Exons    | 8849..8905, 8851..8910, 8851..8910, 8899..8928, 8900..8932, 9103..9150, 9194..9418, 9202..9426, 9202..9414 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
|----------|-------|---------|---------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46088  | Strand | -             |
| Start    | 64702  | End    | 67526         |
| Name     | OJ990605_36.9919.C1.o27.tm   | Method | TBLASTX:Maize |
| Start    | 8896   | End    | 9526          |
| GI       | none   | Score  | 77            |
| Exons    | 8896..8985, 8897..8944, 8956..8994, 9083..9181, 9097..9183, 9098..9181, 9102..9200, 9138..9452, 9148..9453, 9182..9454, 9184..9456, 9467..9511, 9472..9510, 9485..9526 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o43.tc   | Method  | TBLASTX:Cress       |
| Start    | 8897   | End     | 9426                |
| GI       | none   | Score   | 45                  |
| Exons    | 8897..8935, 8976..9044, 9007..9039, 9105..9152, 9105..9134, 9197..9421, 9202..9426, 9202..9414, 9203..9415, 9210..9425 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o63.tm   | Method  | TBLASTX:Maize       |
| Start    | 9924   | End     | 33553               |
| GI       | none   | Score   | 44                  |
| Exons    | 9924..9950, 10074..10151, 10078..10233, 10080..10235, 10081..10236, 33474..33536, 33475..33540, 33478..33546, 33491..33553 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o52.tm   | Method  | TBLASTX:Maize       |
| Start    | 10765  | End     | 11037               |
| GI       | none   | Score   | 86                  |
| Exons    | 10765..10833, 10766..10855, 10815..10919, 10823..10960, 10823..10963, 10825..11004, 10952..11035, 10953..11036, 10954..11037, 10954..11037 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o57.tm                             | Method  | TBLASTX:Maize       |
| Start    | 11972  | End     | 12175               |
| GI       | none   | Score   | 106                 |
| Exons    | 11972..12046, 11974..12045, 12032..12175, 12040..12165 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o60.tc | Method  | TBLASTX:Cress       |
| Start    | 13030                      | End     | 13167               |
| GI       | none                       | Score   | 191                 |
| Exons    | 13030..13167, 13030..13167 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088 | Strand  | -                   |
| Start    | 64702 | End     | 67526               |



|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990605_36.9919.C1.o54.tm   | Method | TBLASTX:Maize |
| Start | 13036  | End    | 13308         |
| GI    | none   | Score  | 250           |
| Exons | 13036..13200, 13036..13218, 13037..13219, 13059..13226, 13264..13308, 13264..13302 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o61.tc   | Method  | TBLASTX:Cress       |
| Start    | 13814  | End     | 14136               |
| GI       | none   | Score   | 41                  |
| Exons    | 13814..13861, 13926..13973, 13927..13974, 13963..14109, 13965..14084, 13975..14136 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o19.tm   | Method  | TBLASTX:Maize       |
| Start    | 13887  | End     | 14459               |
| GI       | none   | Score   | 44                  |
| Exons    | 13887..13913, 13887..13913, 13888..13926, 13888..13935, 13922..13969, 13923..13970, 13924..13974, 13959..14135, 13963..14136, 13967..14143, 13969..14136, 14112..14342, 14114..14341, 14151..14219, 14172..14225, 14174..14221, 14334..14378, 14337..14381, 14364..14453, 14370..14459 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o31.tw   | Method  | TBLASTX:Wheat       |
| Start    | 13926  | End     | 14124               |
| GI       | none   | Score   | 50                  |
| Exons    | 13926..13973, 13927..13974, 13963..14124, 13965..14084, 13975..14118 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o27.tw   | Method  | TBLASTX:Wheat       |
| Start    | 14172  | End     | 14756               |
| GI       | none   | Score   | 86                  |
| Exons    | 14172..14243, 14172..14219, 14173..14244, 14174..14221, 14240..14266, 14242..14262, 14265..14345, 14277..14408, 14316..14396, 14500..14595, 14505..14582, 14573..14614, 14707..14748, 14709..14756 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o39.ts | Method  | TBLASTX:Soybean     |
| Start    | 14828                      | End     | 14965               |
| GI       | none                       | Score   | 128                 |
| Exons    | 14828..14956, 14843..14965 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088 | Strand  | -                   |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 64702  | End    | 67526         |
| Name  | OJ990605_36.9919.C1.o28.tc   | Method | TBLASTX:Cress |
| Start | 16318  | End    | 16888         |
| GI    | none   | Score  | 38            |
| Exons | 16318..16353, 16323..16352, 16370..16444, 16371..16445,<br>16495..16767, 16503..16769, 16503..16766, 16505..16768,<br>16770..16886, 16771..16881, 16781..16888, 16781..16888 |        |               |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o28.ts  | Method  | TBLASTX:Soybean     |
| Start    | 16362   | End     | 16768               |
| GI       | none  | Score   | 51                  |
| Exons    | 16362..16436, 16365..16469, 16382..16456, 16384..16479,<br>16473..16766, 16475..16768, 16504..16767 |         |                     |

|          |                             |         |                     |
|----------|-----------------------------|---------|---------------------|
| Seq. No. | 22135                       | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                       | Strand  | -                   |
| Start    | 64702                       | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o28.tm  | Method  | TBLASTX:Maize       |
| Start    | 16383                       | End     | 16781               |
| GI       | none                        | Score   | 542                 |
| Exons    | 16383..16781, 16385..16780. |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o46.tm                             | Method  | TBLASTX:Maize       |
| Start    | 16782  | End     | 16975               |
| GI       | none   | Score   | 304                 |
| Exons    | 16782..16967, 16782..16973, 16784..16972, 16784..16975 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o26.tc                             | Method  | TBLASTX:Cress       |
| Start    | 16968  | End     | 17329               |
| GI       | none   | Score   | 483                 |
| Exons    | 16968..17327, 16970..17329, 16970..17284, 16984..17328 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o11.ts   | Method  | TBLASTX:Soybean     |
| Start    | 17010  | End     | 17841               |
| GI       | none   | Score   | 568                 |
| Exons    | 17010..17414, 17012..17284, 17014..17415, 17152..17415,<br>17274..17420, 17415..17564, 17416..17571, 17438..17581,<br>17585..17839, 17597..17839, 17610..17840, 17623..17841 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o38.tc | Method  | TBLASTX:Cress       |
| Start    | 17330                      | End     | 17696               |
| GI       | none                       | Score   | 88                  |

Exons 17330..17410, 17330..17377, 17337..17414, 17337..17420,  
17338..17454, 17394..17576, 17415..17564, 17419..17577,  
17420..17581, 17438..17581, 17585..17692, 17585..17692,  
17610..17696, 17638..17694

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o16.ts  | Method  | TBLASTX:Soybean     |
| Start    | 17938   | End     | 18482               |
| GI       | none  | Score   | 227                 |
| Exons    | 17938..18117, 17946..18098, 17948..18118, 17961..18128,<br>18080..18262, 18095..18262, 18099..18284, 18255..18293,<br>18304..18441, 18308..18460, 18308..18442, 18309..18482,<br>18315..18479 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o41.tc               | Method  | TBLASTX:Cress       |
| Start    | 18029                                    | End     | 18224               |
| GI       | none                                     | Score   | 175                 |
| Exons    | 18029..18223, 18029..18223, 18030..18224 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o23.ts   | Method  | TBLASTX:Soybean     |
| Start    | 18682  | End     | 19097               |
| GI       | none   | Score   | 105                 |
| Exons    | 18682..18909, 18687..18911, 18689..18907, 18926..19054,<br>18926..19060, 18930..19064, 18931..19074, 19061..19096,<br>19062..19097 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o56.tm               | Method  | TBLASTX:Maize       |
| Start    | 18875                                    | End     | 19478               |
| GI       | none                                     | Score   | 153                 |
| Exons    | 18875..19114, 18930..19217, 19287..19478 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o42.tc               | Method  | TBLASTX:Cress       |
| Start    | 18930                                    | End     | 19487               |
| GI       | none                                     | Score   | 155                 |
| Exons    | 18930..19217, 18968..19114, 19287..19487 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o9.ts                               | Method  | TBLASTX:Soybean     |
| Start    | 19400   | End     | 20216               |
| GI       | none  | Score   | 437                 |
| Exons    | 19400..19612, 19401..19733, 19473..19760, 19588..19761, |         |                     |

19742..19861, 19759..20211, 19761..20216, 19762..20211,  
19802..20215

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o27.tc  | Method  | TBLASTX:Cress       |
| Start    | 19500   | End     | 19899               |
| GI       | none  | Score   | 323                 |
| Exons    | 19500..19739, 19506..19739, 19597..19761, 19768..19899,<br>19770..19898, 19771..19899 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o45.tc | Method  | TBLASTX:Cress       |
| Start    | 20194                      | End     | 20475               |
| GI       | none                       | Score   | 270                 |
| Exons    | 20194..20475, 20202..20420 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o34.ts   | Method  | TBLASTX:Soybean     |
| Start    | 20301  | End     | 20754               |
| GI       | none   | Score   | 43                  |
| Exons    | 20301..20360, 20332..20361, 20362..20487, 20362..20436,<br>20458..20562, 20475..20714, 20484..20669, 20497..20709,<br>20710..20754, 20713..20751 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o24.tc                             | Method  | TBLASTX:Cress       |
| Start    | 20564  | End     | 20985               |
| GI       | none   | Score   | 52                  |
| Exons    | 20564..20611, 20565..20669, 20581..20985, 20620..20985 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o7.tc   | Method  | TBLASTX:Cress       |
| Start    | 20997   | End     | 21741               |
| GI       | none  | Score   | 377                 |
| Exons    | 20997..21428, 20997..21437, 20998..21444, 21082..21438,<br>21491..21739, 21505..21741, 21507..21740 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o21.ts  | Method  | TBLASTX:Soybean     |
| Start    | 21271   | End     | 21713               |
| GI       | none  | Score   | 218                 |
| Exons    | 21271..21438, 21287..21436, 21306..21437, 21479..21709,<br>21489..21626, 21496..21711, 21507..21713 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
|----------|-------|---------|---------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46088  | Strand | -             |
| Start    | 64702  | End    | 67526         |
| Name     | OJ990605_36.9919.C1.o47.tm   | Method | TBLASTX:Maize |
| Start    | 21382  | End    | 21715         |
| GI       | none   | Score  | 82            |
| Exons    | 21382..21438, 21384..21437, 21479..21715, 21489..21626, 21496..21714 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 21714  | End     | 24676               |
| GI       | none   | Score   | 99                  |
| Exons    | 21714..21788, 21718..21792, 21721..21792, 21917..21964, 21921..21965, 21983..22015, 22013..22720, 22014..22373, 22015..22722, 22716..22841, 22717..22866, 22718..22846, 22853..22915, 22859..23467, 22874..22918, 22894..23457, 22915..23604, 22916..23605, 23076..23606, 23485..23607, 23495..23620, 23609..23665, 23612..23761, 23619..23762, 23620..23823, 23731..23901, 23756..23899, 23772..23900, 24327..24611, 24328..24609, 24401..24676 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o50.tm   | Method  | TBLASTX:Maize       |
| Start    | 21717  | End     | 22213               |
| GI       | none   | Score   | 140                 |
| Exons    | 21717..21818, 21718..21822, 21718..21819, 21917..21964, 21921..21965, 21983..22015, 22013..22213, 22015..22212 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o64.tc   | Method  | TBLASTX:Cress       |
| Start    | 21753  | End     | 22105               |
| GI       | none   | Score   | 81                  |
| Exons    | 21753..21818, 21754..21810, 21926..21976, 21930..21977, 22016..22105, 22018..22104 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o20.tc | Method  | TBLASTX:Cress       |
| Start    | 22108                      | End     | 22501               |
| GI       | none                       | Score   | 595                 |
| Exons    | 22108..22500, 22109..22501 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o12.tw   | Method  | TBLASTX:Wheat       |
| Start    | 22801  | End     | 23244               |
| GI       | none   | Score   | 182                 |
| Exons    | 22801..22914, 22801..22914, 22802..22915, 22893..23243, 22894..23244, 22915..23244 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o22.tc                             | Method  | TBLASTX:Cress       |
| Start    | 22945  | End     | 23361               |
| GI       | none   | Score   | 394                 |
| Exons    | 22945..23355, 22946..23359, 22950..23357, 22951..23361 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o34.tc   | Method  | TBLASTX:Cress       |
| Start    | 23376  | End     | 23891               |
| GI       | none   | Score   | 158                 |
| Exons    | 23376..23573, 23376..23594, 23377..23613, 23377..23598, 23635..23889, 23700..23882, 23745..23891 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o48.tm   | Method  | TBLASTX:Maize       |
| Start    | 23871  | End     | 24232               |
| GI       | none   | Score   | 138                 |
| Exons    | 23871..23993, 23878..24018, 23880..23993, 23887..23994, 23890..23964, 23891..23938, 23892..23963, 23908..23964, 23914..24024, 23918..24016, 23922..23969, 23923..24018, 23923..24024, 23927..24028, 23953..24027, 23956..24015, 23960..24046, 23960..24067, 23981..24067, 23999..24055, 24002..24055, 24008..24106, 24008..24055, 24008..24106, 24008..24055, 24050..24214, 24050..24214, 24056..24211, 24074..24229, 24077..24211, 24085..24129, 24092..24232, 24092..24115, 24113..24145, 24119..24184, 24133..24177, 24134..24184, 24136..24213, 24137..24223, 24142..24186, 24170..24232, 24190..24228, 24193..24231 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o8.tm  | Method  | TBLASTX:Maize       |
| Start    | 24233  | End     | 25044               |
| GI       | none   | Score   | 46                  |
| Exons    | 24233..24271, 24266..24631, 24296..24349, 24297..24632, 24298..25044, 24298..24630, 24324..25043, 24706..25044 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o46.tc   | Method  | TBLASTX:Cress       |
| Start    | 24275  | End     | 24573               |
| GI       | none   | Score   | 66                  |
| Exons    | 24275..24382, 24297..24572, 24298..24573, 24298..24570, 24327..24572 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088 | Strand  | -                   |
| Start    | 64702 | End     | 67526               |

|       |   |        |               |
|-------|---|--------|---------------|
| Name  | OJ990605_36.9919.C1.o5.tw   | Method | TBLASTX:Wheat |
| Start | 24498   | End    | 25117         |
| GI    | none  | Score  | 42            |
| Exons | 24498..24569, 24509..24547, 24535..24795, 24542..24703,<br>24696..25112, 24696..25115, 24697..25116, 24698..25117 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o31.tc   | Method  | TBLASTX:Cress       |
| Start    | 24574  | End     | 25281               |
| GI       | none   | Score   | 55                  |
| Exons    | 24574..24609, 24608..24697, 24616..24693, 24685..24951,<br>24711..24932, 24719..24979, 24945..25049, 24945..25052,<br>24946..25281, 24946..25077, 25135..25272, 25137..25280 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o5.tc  | Method  | TBLASTX:Cress       |
| Start    | 25351  | End     | 26496               |
| GI       | none   | Score   | 47                  |
| Exons    | 25351..25407, 25359..25451, 25513..25569, 25516..25560,<br>25564..25638, 25572..25628, 25650..26375, 25651..26382,<br>26179..26382, 26440..26496, 26442..26495 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o8.ts  | Method  | TBLASTX:Soybean     |
| Start    | 25486  | End     | 26561               |
| GI       | none   | Score   | 143                 |
| Exons    | 25486..25641, 25507..25641, 25650..26027, 25650..26375,<br>25651..26442, 26311..26439, 26312..26443, 26422..26484,<br>26429..26497, 26429..26497, 26442..26501, 26454..26561 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o61.tm | Method  | TBLASTX:Maize       |
| Start    | 25756                      | End     | 25893               |
| GI       | none                       | Score   | 215                 |
| Exons    | 25756..25893, 25756..25893 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o36.tm  | Method  | TBLASTX:Maize       |
| Start    | 26082   | End     | 26376               |
| GI       | none  | Score   | 67                  |
| Exons    | 26082..26171, 26090..26137, 26118..26375, 26118..26375,<br>26119..26376, 26176..26376 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o11.tw | Method  | TBLASTX:Wheat       |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 26133                                    | End   | 26541 |
| GI    | none                                     | Score | 632   |
| Exons | 26133..26540, 26137..26541, 26176..26541 |       |       |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o22.tm   | Method  | TBLASTX:Maize       |
| Start    | 26377  | End     | 27037               |
| GI       | none   | Score   | 276                 |
| Exons    | 26377..26550, 26378..26548, 26545..26577, 26546..26578,<br>26547..26585, 26583..26624, 26589..26624, 26632..26697,<br>26632..26697, 26683..26727, 26689..26781, 26697..26759,<br>26699..26782, 26821..26997, 26831..27016, 26834..27016,<br>27011..27037, 27011..27037 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o18.tc  | Method  | TBLASTX:Cress       |
| Start    | 26696   | End     | 27318               |
| GI       | none  | Score   | 35                  |
| Exons    | 26696..26716, 26697..26714, 26831..27205, 26833..27207,<br>26834..27208, 27203..27316, 27205..27318 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o5.ts  | Method  | TBLASTX:Soybean     |
| Start    | 26698  | End     | 50405               |
| GI       | none   | Score   | 530                 |
| Exons    | 26698..26721, 26829..27527, 26831..27520, 26833..27549,<br>26834..27544, 27102..27554, 27560..27601, 27785..28534,<br>27786..28385, 28440..28535, 29167..29229, 29254..29322,<br>29299..29586, 29312..29584, 29444..29590, 29611..29679,<br>30015..30194, 30019..30195, 30019..30195, 30024..30197,<br>30275..30298, 30286..30345, 30288..30359, 30291..30344,<br>30292..30345, 30351..30404, 30352..30405, 30355..30402,<br>30390..30443, 30392..30475, 30412..30483, 30436..30480,<br>30483..30542, 30502..30549, 30502..30543, 30571..30639,<br>30574..30645, 30581..30640, 30730..30747, 30829..30870,<br>30836..30865, 30906..31406, 30910..31404, 31426..31461,<br>31466..32029, 31477..32376, 31656..32309, 32140..32310,<br>32307..32375, 32311..32367, 50046..50405 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o30.tm | Method  | TBLASTX:Maize       |
| Start    | 27038                      | End     | 27322               |
| GI       | none                       | Score   | 475                 |
| Exons    | 27038..27322, 27038..27322 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o13.tc | Method  | TBLASTX:Cress       |



|       |  |       |       |
|-------|--|-------|-------|
| Start | 27774  | End   | 28286 |
| GI    | none   | Score | 58    |
| Exons | 27774..27824, 27781..27822, 27812..28261, 27825..28286, 27827..28285 |       |       |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o41.tm                             | Method  | TBLASTX:Maize       |
| Start    | 28181  | End     | 28443               |
| GI       | none   | Score   | 327                 |
| Exons    | 28181..28441, 28181..28387, 28183..28443, 28216..28443 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o45.tm   | Method  | TBLASTX:Maize       |
| Start    | 28444  | End     | 28787               |
| GI       | none   | Score   | 172                 |
| Exons    | 28444..28566, 28445..28561, 28449..28565, 28450..28566, 28553..28687, 28559..28702, 28561..28731, 28578..28715, 28696..28719, 28718..28759, 28719..28760, 28762..28785, 28764..28787 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o10.tm   | Method  | TBLASTX:Maize       |
| Start    | 28874  | End     | 29809               |
| GI       | none   | Score   | 186                 |
| Exons    | 28874..29041, 28889..28918, 28911..29042, 29007..29042, 29018..29098, 29051..29149, 29080..29151, 29090..29152, 29126..29218, 29151..29222, 29152..29223, 29154..29222, 29227..29268, 29227..29265, 29254..29310, 29255..29311, 29264..29311, 29272..29313, 29292..29378, 29303..29674, 29305..29673, 29443..29697, 29681..29725, 29683..29727, 29711..29809, 29724..29807, 29726..29809 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o37.tc               | Method  | TBLASTX:Cress       |
| Start    | 29278                                    | End     | 29584               |
| GI       | none                                     | Score   | 328                 |
| Exons    | 29278..29574, 29279..29584, 29444..29584 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o3.tm   | Method  | TBLASTX:Maize       |
| Start    | 29812   | End     | 31478               |
| GI       | none  | Score   | 200                 |
| Exons    | 29812..29976, 29812..29913, 29904..29936, 29949..30263, 29961..30263, 29962..30264, 29969..30265, 30223..30348, 30233..30346, 30235..30348, 30348..30440, 30349..30465, 30349..30477, 30356..30487, 30427..30573, 30469..30573, 30483..30578, 30566..30643, 30567..30647, 30574..30651, |         |                     |

30604..30714, 30607..30720, 30635..30736, 30658..30873,  
 30694..30819, 30719..30865, 30822..30908, 30876..31406,  
 30895..31416, 31135..31416, 31411..31464, 31411..31470,  
 31416..31478

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o19.tc  | Method  | TBLASTX:Cress       |
| Start    | 30078   | End     | 31698               |
| GI       | none  | Score   | 129                 |
| Exons    | 30078..30176, 30087..30176, 31002..31376, 31002..31406,<br>31003..31413, 31466..31690, 31480..31698, 31501..31698 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o15.tw   | Method  | TBLASTX:Wheat       |
| Start    | 30195  | End     | 30672               |
| GI       | none   | Score   | 183                 |
| Exons    | 30195..30311, 30196..30315, 30196..30315, 30312..30359,<br>30312..30350, 30348..30440, 30349..30471, 30350..30472,<br>30446..30556, 30474..30557, 30475..30558, 30475..30555,<br>30555..30641, 30558..30638, 30559..30645, 30568..30672,<br>30635..30670 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o9.tw   | Method  | TBLASTX:Wheat       |
| Start    | 30894   | End     | 31339               |
| GI       | none  | Score   | 120                 |
| Exons    | 30894..30980, 30895..30978, 30908..30988, 30912..30980,<br>30984..31334, 30986..31324, 30989..31339 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o6.tm  | Method  | TBLASTX:Maize       |
| Start    | 31687  | End     | 50454               |
| GI       | none   | Score   | 148                 |
| Exons    | 31687..32058, 49138..49278, 49143..49280, 49278..49925,<br>49281..49529, 49282..49914, 49569..49925, 49926..50168,<br>49944..50435, 50035..50454 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o1.tc   | Method  | TBLASTX:Cress       |
| Start    | 31699   | End     | 50613               |
| GI       | none  | Score   | 129                 |
| Exons    | 31699..32058, 48701..48787, 48711..48941, 48712..48951,<br>48777..48941, 48784..48945, 48872..48955, 48922..49296,<br>48943..49278, 49244..49279, 49278..50612, 49279..49950,<br>49280..50287, 49575..50366, 50035..50613 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
|----------|-------|---------|---------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46088  | Strand | -             |
| Start    | 64702  | End    | 67526         |
| Name     | OJ990605_36.9919.C1.o6.tw  | Method | TBLASTX:Wheat |
| Start    | 31774  | End    | 50339         |
| GI       | none   | Score  | 133           |
| Exons    | 31774..32070, 49644..49925, 49645..49914, 49650..49919, 49944..50006, 50013..50051, 50062..50331, 50076..50339 |        |               |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o54.tc | Method  | TBLASTX:Cress       |
| Start    | 32335                      | End     | 32475               |
| GI       | none                       | Score   | 229                 |
| Exons    | 32335..32475, 32337..32474 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o20.ts                             | Method  | TBLASTX:Soybean     |
| Start    | 32606  | End     | 33036               |
| GI       | none   | Score   | 457                 |
| Exons    | 32606..32992, 32607..33029, 32607..33029, 32791..33036 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o33.tc   | Method  | TBLASTX:Cress       |
| Start    | 32606  | End     | 33239               |
| GI       | none   | Score   | 431                 |
| Exons    | 32606..32992, 32607..33035, 32616..33035, 32800..33036, 33163..33228, 33167..33238, 33167..33235, 33168..33239 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o25.tc   | Method  | TBLASTX:Cress       |
| Start    | 33497  | End     | 34179               |
| GI       | none   | Score   | 86                  |
| Exons    | 33497..33580, 33498..33578, 33606..33803, 33608..33808, 33609..33803, 33822..33953, 33857..33925, 34068..34178, 34069..34179, 34094..34177 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 33825  | End     | 37559               |
| GI       | none   | Score   | 117                 |
| Exons    | 33825..33971, 33857..33922, 33892..33933, 34044..35306, 34045..34557, 34094..35341, 34094..35341, 36322..36414, 36426..36569, 36444..36533, 36573..36653, 36697..37038, 36720..37034, 37089..37133, 37155..37559, 37159..37260 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088 | Strand  | -                   |
| Start    | 64702 | End     | 67526               |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990605_36.9919.C1.o1.tm  | Method | TBLASTX:Maize |
| Start | 33843  | End    | 37805         |
| GI    | none   | Score  | 164           |
| Exons | 33843..33941, 33857..33940, 33942..33959, 33943..33969,<br>34001..34048, 34002..34055, 34003..34059, 34053..35306,<br>34057..34557, 34082..35494, 34094..35626, 35263..35616,<br>35544..35627, 35592..35687, 35597..35704, 35602..35682,<br>35606..35686, 36426..36569, 36573..36653, 36720..36902,<br>36720..37034, 36721..37038, 37089..37133, 37155..37559,<br>37159..37572, 37324..37560, 37566..37805, 37590..37715 |        |               |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o6.tc   | Method  | TBLASTX:Cress       |
| Start    | 34220   | End     | 36924               |
| GI       | none  | Score   | 266                 |
| Exons    | 34220..34387, 34221..34385, 34225..34386, 34381..34557,<br>34386..34766, 34388..34768, 34389..34769, 36438..36569,<br>36444..36542, 36579..36653, 36720..36905, 36720..36923,<br>36721..36924 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o3.tc  | Method  | TBLASTX:Cress       |
| Start    | 34871  | End     | 38127               |
| GI       | none   | Score   | 34                  |
| Exons    | 34871..34900, 34874..34918, 34922..35155, 34925..35329,<br>34929..35279, 35342..35488, 35343..35495, 35666..35797,<br>35807..35911, 36924..38126, 36961..38127, 36976..38127 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o15.ts  | Method  | TBLASTX:Soybean     |
| Start    | 35341   | End     | 38007               |
| GI       | none  | Score   | 163                 |
| Exons    | 35341..35601, 35342..35494, 35342..35815, 35343..35495,<br>35344..35496, 35539..35592, 35544..35816, 35549..35818,<br>35629..35826, 35629..35817, 37566..37736, 37567..37737,<br>37740..37787, 37893..38006, 37894..38007 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o59.tc  | Method  | TBLASTX:Cress       |
| Start    | 35496   | End     | 35666               |
| GI       | none  | Score   | 141                 |
| Exons    | 35496..35654, 35498..35659, 35521..35655, 35543..35665,<br>35544..35666 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o31.tm | Method  | TBLASTX:Maize       |
| Start    | 35705                      | End     | 38138               |

|       |  |       |     |
|-------|--|-------|-----|
| GI    | none   | Score | 384 |
| Exons | 35705..35998, 35705..35998, 35706..35999, 37893..38015, 37915..38007, 38022..38138 |       |     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o24.ts   | Method  | TBLASTX:Soybean     |
| Start    | 35829  | End     | 38258               |
| GI       | none   | Score   | 351                 |
| Exons    | 35829..36074, 35829..35924, 35858..36073, 38022..38138, 38205..38258 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o15.tc   | Method  | TBLASTX:Cress       |
| Start    | 35915  | End     | 38429               |
| GI       | none   | Score   | 75                  |
| Exons    | 35915..36034, 35916..36035, 35984..36409, 35985..36434, 35988..36434, 35998..36435, 36013..36435, 38217..38363, 38358..38429 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o7.tm  | Method  | TBLASTX:Maize       |
| Start    | 35999  | End     | 39277               |
| GI       | none   | Score   | 742                 |
| Exons    | 35999..36157, 36155..36226, 38147..38599, 38147..38482, 38148..38627, 38149..38604, 38574..38687, 38590..38634, 38597..38674, 38649..38777, 38663..38779, 38669..38785, 38780..38809, 38781..38810, 38823..38873, 38826..38873, 38851..38955, 38865..38954, 38888..38968, 38952..39023, 38953..39009, 38957..39010, 39004..39084, 39006..39086, 39006..39086, 39114..39266, 39126..39263, 39130..39270, 39131..39277 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o18.ts   | Method  | TBLASTX:Soybean     |
| Start    | 36074  | End     | 38698               |
| GI       | none   | Score   | 365                 |
| Exons    | 36074..36157, 36155..36226, 38280..38597, 38280..38615, 38284..38616, 38287..38616, 38669..38698 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o39.tc   | Method  | TBLASTX:Cress       |
| Start    | 38430  | End     | 38698               |
| GI       | none   | Score   | 234                 |
| Exons    | 38430..38597, 38430..38597, 38431..38598, 38437..38598, 38592..38675, 38669..38698 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
|----------|-------|---------|---------------------|

|          |  |        |                 |
|----------|--|--------|-----------------|
| Gene No. | 46088  | Strand | -               |
| Start    | 64702  | End    | 67526           |
| Name     | OJ990605_36.9919.C1.o36.ts   | Method | TBLASTX:Soybean |
| Start    | 39156  | End    | 40146           |
| GI       | none   | Score  | 149             |
| Exons    | 39156..39311, 39157..39312, 39160..39312, 39197..39322, 39999..40145, 40028..40144, 40030..40146, 40036..40146 |        |                 |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o51.tc   | Method  | TBLASTX:Cress       |
| Start    | 39207  | End     | 39538               |
| GI       | none   | Score   | 136                 |
| Exons    | 39207..39347, 39207..39335, 39214..39351, 39323..39388, 39324..39374, 39325..39378, 39326..39379, 39437..39481, 39437..39511, 39441..39512, 39495..39533, 39500..39538 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o34.tm   | Method  | TBLASTX:Maize       |
| Start    | 39332  | End     | 39675               |
| GI       | none   | Score   | 240                 |
| Exons    | 39332..39487, 39335..39487, 39437..39559, 39483..39599, 39487..39612, 39489..39596, 39585..39635, 39589..39672, 39592..39654, 39596..39673, 39625..39675 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o32.tc               | Method  | TBLASTX:Cress       |
| Start    | 40006                                    | End     | 40356               |
| GI       | none                                     | Score   | 393                 |
| Exons    | 40006..40263, 40008..40343, 40009..40356 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 40017  | End     | 41171               |
| GI       | none   | Score   | 556                 |
| Exons    | 40017..40367, 40017..40352, 40217..40369, 40303..40368, 40362..40991, 40366..41022, 40367..40975, 40398..40988, 40945..41148, 40970..41149, 40986..41150, 40986..41150, 40987..41151, 41151..41171, 41153..41170 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o4.tw  | Method  | TBLASTX:Wheat       |
| Start    | 40120  | End     | 51769               |
| GI       | none   | Score   | 58                  |
| Exons    | 40120..40191, 51084..51212, 51084..51245, 51086..51229, 51203..51301, 51232..51294, 51257..51331, 51295..51723, 51315..51767, 51315..51767, 51344..51769, 51586..51768 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o35.tc   | Method  | TBLASTX:Cress       |
| Start    | 40422  | End     | 41160               |
| GI       | none   | Score   | 56                  |
| Exons    | 40422..40478, 40434..40454, 40489..40542, 40506..40541,<br>40506..40637, 40547..40663, 40548..40664, 40552..40671,<br>40659..40775, 40671..40775, 40672..40785, 40784..40876,<br>40796..40876, 40798..40881, 40967..41146, 40974..41156,<br>40974..41156, 40975..41160 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o27.ts   | Method  | TBLASTX:Soybean     |
| Start    | 40485  | End     | 41161               |
| GI       | none   | Score   | 54                  |
| Exons    | 40485..40541, 40486..40545, 40505..40546, 40518..40640,<br>40547..40666, 40548..40676, 40719..40754, 40729..40752,<br>40788..40814, 40795..40869, 40815..40886, 40829..40873,<br>40881..40907, 40885..40908, 40986..41153, 40987..41154,<br>40987..41154, 41000..41161 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o39.tm   | Method  | TBLASTX:Maize       |
| Start    | 41338  | End     | 41724               |
| GI       | none   | Score   | 291                 |
| Exons    | 41338..41358, 41342..41626, 41361..41486, 41362..41493,<br>41381..41629, 41539..41634, 41625..41714, 41628..41714,<br>41629..41724, 41629..41715 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o17.tm   | Method  | TBLASTX:Maize       |
| Start    | 41805  | End     | 42347               |
| GI       | none   | Score   | 97                  |
| Exons    | 41805..41888, 41805..41858, 41806..41886, 41807..41887,<br>41833..41889, 41888..42040, 41889..42314, 41890..42330,<br>41892..42320, 42312..42347 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o17.tw  | Method  | TBLASTX:Wheat       |
| Start    | 41975   | End     | 42375               |
| GI       | none  | Score   | 101                 |
| Exons    | 41975..42013, 42012..42092, 42024..42092, 42031..42093,<br>42037..42093, 42052..42375, 42081..42374 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22135                     | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                     | Strand  | -                   |
| Start    | 64702                     | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o9.tc | Method  | TBLASTX:Cress       |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 42102  | End   | 43099 |
| GI    | none   | Score | 585   |
| Exons | 42102..42731, 42103..42732, 42105..42731, 42112..42732,<br>42602..42736, 42750..42821, 42751..42798, 42964..43083,<br>42996..43085, 43003..43080, 43004..43099, 43004..43090 |       |       |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o17.ts  | Method  | TBLASTX:Soybean     |
| Start    | 42327   | End     | 42830               |
| GI       | none  | Score   | 369                 |
| Exons    | 42327..42722, 42327..42728, 42328..42729, 42328..42729,<br>42635..42730, 42774..42830 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o49.tm   | Method  | TBLASTX:Maize       |
| Start    | 42608  | End     | 42865               |
| GI       | none   | Score   | 163                 |
| Exons    | 42608..42721, 42608..42721, 42609..42722, 42610..42750,<br>42716..42808, 42718..42831, 42720..42830, 42721..42843,<br>42722..42841, 42839..42865, 42840..42863, 42841..42864 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o11.tm   | Method  | TBLASTX:Maize       |
| Start    | 43459  | End     | 44450               |
| GI       | none   | Score   | 78                  |
| Exons    | 43459..43572, 43491..43574, 43567..43728, 43569..43727,<br>43570..43740, 43720..43950, 43721..43951, 43724..43960,<br>43725..43961, 43957..43992, 43960..44079, 43961..43990,<br>43984..44076, 43985..44083, 43995..44087, 44159..44206,<br>44166..44264, 44167..44265, 44259..44306, 44260..44337,<br>44260..44337, 44261..44338, 44274..44342, 44335..44409,<br>44336..44446, 44336..44449, 44349..44450 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o38.ts  | Method  | TBLASTX:Soybean     |
| Start    | 43812   | End     | 44079               |
| GI       | none  | Score   | 165                 |
| Exons    | 43812..43961, 43834..43995, 43851..43961, 43951..44001,<br>43957..44079, 43958..44074, 43983..44075, 44023..44076 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o28.tw  | Method  | TBLASTX:Wheat       |
| Start    | 43836   | End     | 44098               |
| GI       | none  | Score   | 176                 |
| Exons    | 43836..44024, 43843..43953, 43844..43960, 43940..43993,<br>43959..44000, 44012..44098, 44024..44098 |         |                     |



|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o65.tc   | Method  | TBLASTX:Cress       |
| Start    | 44339  | End     | 44475               |
| GI       | none   | Score   | 133                 |
| Exons    | 44339..44455, 44342..44473, 44349..44462, 44349..44474, 44452..44475 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 45065  | End     | 47767               |
| GI       | none   | Score   | 68                  |
| Exons    | 45065..45115, 45065..45115, 45118..45186, 45128..45157, 45183..45842, 45189..45824, 45822..45860, 45829..46038, 45833..46048, 45864..46055, 45865..46035, 45872..46036, 46021..46545, 46024..46407, 46025..46576, 46025..46555, 46559..46870, 46581..47081, 46597..47082, 46876..47082, 47079..47240, 47083..47241, 47084..47266, 47085..47267, 47276..47320, 47297..47350, 47297..47326, 47302..47349, 47343..47369, 47347..47370, 47400..47462, 47402..47464, 47417..47464, 47431..47475, 47436..47558, 47469..47513, 47470..47517, 47485..47607, 47492..47593, 47592..47654, 47592..47651, 47593..47652, 47649..47675, 47654..47767, 47656..47766 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o12.tc                             | Method  | TBLASTX:Cress       |
| Start    | 45272  | End     | 45749               |
| GI       | none   | Score   | 463                 |
| Exons    | 45272..45739, 45273..45740, 45273..45749, 45403..45747 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o14.ts               | Method  | TBLASTX:Soybean     |
| Start    | 45324                                    | End     | 45774               |
| GI       | none                                     | Score   | 383                 |
| Exons    | 45324..45758, 45324..45758, 45400..45774 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o8.tc  | Method  | TBLASTX:Cress       |
| Start    | 45836  | End     | 46553               |
| GI       | none   | Score   | 146                 |
| Exons    | 45836..46024, 45861..46025, 45862..46128, 46015..46086, 46073..46129, 46122..46292, 46122..46199, 46123..46545, 46124..46552, 46239..46553 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088 | Strand  | -                   |
| Start    | 64702 | End     | 67526               |

|       |  |        |                 |
|-------|--|--------|-----------------|
| Name  | OJ990605_36.9919.C1.o12.ts               | Method | TBLASTX:Soybean |
| Start | 45904                                    | End    | 46588           |
| GI    | none                                     | Score  | 778             |
| Exons | 45904..46545, 45905..46588, 45905..46552 |        |                 |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o3.tw  | Method  | TBLASTX:Wheat       |
| Start    | 45991                      | End     | 46522               |
| GI       | none                       | Score   | 697                 |
| Exons    | 45991..46521, 45992..46522 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o29.tc   | Method  | TBLASTX:Cress       |
| Start    | 46584  | End     | 46983               |
| GI       | none   | Score   | 251                 |
| Exons    | 46584..46616, 46632..46856, 46633..46983, 46633..46977, 46665..46979, 46916..46981 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o22.ts               | Method  | TBLASTX:Soybean     |
| Start    | 46590                                    | End     | 46923               |
| GI       | none                                     | Score   | 306                 |
| Exons    | 46590..46865, 46591..46923, 46593..46922 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o30.ts   | Method  | TBLASTX:Soybean     |
| Start    | 47675  | End     | 48344               |
| GI       | none   | Score   | 137                 |
| Exons    | 47675..47779, 47676..47795, 47677..47763, 47715..47780, 47739..47825, 47747..47821, 47759..47833, 47761..47841, 47814..47948, 47832..47861, 47867..47965, 47883..47957, 47884..47997, 47975..48043, 48003..48035, 48045..48080, 48045..48080, 48174..48206, 48175..48204, 48262..48333, 48277..48336, 48279..48344 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o47.tc   | Method  | TBLASTX:Cress       |
| Start    | 47696  | End     | 48252               |
| GI       | none   | Score   | 88                  |
| Exons    | 47696..47764, 47698..47763, 47715..47765, 47759..47821, 47759..47836, 47760..47831, 47817..47867, 47895..47957, 47896..47967, 47898..47936, 47944..48168, 47949..48050, 47950..48057, 48042..48107, 48175..48204, 48214..48252 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088 | Strand  | -                   |
| Start    | 64702 | End     | 67526               |

|       |   |        |               |
|-------|---|--------|---------------|
| Name  | OJ990605_36.9919.C1.o16.tm  | Method | TBLASTX:Maize |
| Start | 47853   | End    | 48437         |
| GI    | none  | Score  | 470           |
| Exons | 47853..48185, 47854..48183, 48133..48186, 48180..48356,<br>48180..48371, 48181..48366, 48358..48402, 48360..48437 |        |               |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o37.tm  | Method  | TBLASTX:Maize       |
| Start    | 48651   | End     | 49034               |
| GI       | none  | Score   | 328                 |
| Exons    | 48651..48980, 48652..48996, 48663..48980, 48763..48981,<br>48872..48997, 48965..49033, 48987..49034 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o4.ts  | Method  | TBLASTX:Soybean     |
| Start    | 48711  | End     | 50014               |
| GI       | none   | Score   | 69                  |
| Exons    | 48711..49100, 48712..49296, 48713..48787, 48795..49277,<br>48802..49278, 49277..49489, 49278..50012, 49279..49950,<br>49281..50012, 49688..50014 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o23.tw  | Method  | TBLASTX:Wheat       |
| Start    | 49170   | End     | 49556               |
| GI       | none  | Score   | 63                  |
| Exons    | 49170..49280, 49171..49278, 49278..49556, 49281..49529,<br>49282..49533 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o33.ts  | Method  | TBLASTX:Soybean     |
| Start    | 50406   | End     | 51101               |
| GI       | none  | Score   | 184                 |
| Exons    | 50406..50609, 50406..50609, 50407..50610, 50407..50610,<br>51045..51101 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o43.tm  | Method  | TBLASTX:Maize       |
| Start    | 50454   | End     | 50707               |
| GI       | none  | Score   | 261                 |
| Exons    | 50454..50633, 50455..50661, 50456..50665, 50656..50685,<br>50656..50685, 50690..50707 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o19.tw | Method  | TBLASTX:Wheat       |
| Start    | 50483                      | End     | 50917               |

|       |  |       |     |
|-------|--|-------|-----|
| GI    | none   | Score | 215 |
| Exons | 50483..50632, 50483..50578, 50485..50661, 50485..50622, 50583..50669, 50584..50694, 50629..50715, 50630..50704, 50693..50869, 50702..50869, 50703..50879, 50704..50883, 50706..50897, 50828..50917, 50843..50917 |       |     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o62.tm   | Method  | TBLASTX:Maize       |
| Start    | 50708  | End     | 50897               |
| GI       | none   | Score   | 199                 |
| Exons    | 50708..50845, 50708..50845, 50709..50870, 50710..50847, 50838..50879, 50843..50884, 50844..50897 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o40.tm   | Method  | TBLASTX:Maize       |
| Start    | 51041  | End     | 51350               |
| GI       | none   | Score   | 186                 |
| Exons    | 51041..51163, 51045..51164, 51140..51250, 51149..51205, 51151..51228, 51153..51248, 51154..51258, 51223..51348, 51225..51350 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o10.ts                             | Method  | TBLASTX:Soybean     |
| Start    | 51324  | End     | 52027               |
| GI       | none   | Score   | 1013                |
| Exons    | 51324..52010, 51324..52025, 51347..52027, 51512..52027 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o17.tc   | Method  | TBLASTX:Cress       |
| Start    | 51333  | End     | 51809               |
| GI       | none   | Score   | 41                  |
| Exons    | 51333..51365, 51367..51717, 51368..51790, 51369..51809, 51372..51809 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o9.tm                | Method  | TBLASTX:Maize       |
| Start    | 51351                                    | End     | 52097               |
| GI       | none                                     | Score   | 1079                |
| Exons    | 51351..52049, 51363..52091, 52047..52097 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o26.tw | Method  | TBLASTX:Wheat       |
| Start    | 51770                      | End     | 51952               |
| GI       | none                       | Score   | 319                 |
| Exons    | 51770..51952, 51771..51950 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o1.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 52095  | End     | 52847               |
| GI       | none   | Score   | 926                 |
| Exons    | 52095..52841, 52096..52797, 52096..52842, 52101..52847 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o53.tm                             | Method  | TBLASTX:Maize       |
| Start    | 52100  | End     | 52389               |
| GI       | none   | Score   | 205                 |
| Exons    | 52100..52384, 52101..52388, 52105..52383, 52120..52389 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o63.tc               | Method  | TBLASTX:Cress       |
| Start    | 52332                                    | End     | 52479               |
| GI       | none                                     | Score   | 156                 |
| Exons    | 52332..52454, 52333..52479, 52334..52468 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o25.tm   | Method  | TBLASTX:Maize       |
| Start    | 52442  | End     | 52978               |
| GI       | none   | Score   | 310                 |
| Exons    | 52442..52801, 52451..52657, 52464..52811, 52467..52811, 52919..52978, 52923..52976 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o36.tc   | Method  | TBLASTX:Cress       |
| Start    | 52562  | End     | 52831               |
| GI       | none   | Score   | 353                 |
| Exons    | 52562..52693, 52563..52829, 52563..52829, 52564..52830, 52730..52831 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o29.tm   | Method  | TBLASTX:Maize       |
| Start    | 54502  | End     | 54932               |
| GI       | none   | Score   | 273                 |
| Exons    | 54502..54681, 54508..54681, 54684..54782, 54684..54764, 54685..54783, 54685..54798, 54771..54848, 54779..54850, 54782..54850, 54784..54870, 54818..54916, 54840..54917, 54843..54932, 54847..54918 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088 | Strand  | -                   |
| Start    | 64702 | End     | 67526               |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990605_36.9919.C1.o10.tc   | Method | TBLASTX:Cress |
| Start | 55013  | End    | 56354         |
| GI    | none   | Score  | 699           |
| Exons | 55013..55498, 55015..55503, 55016..55504, 55438..55506,<br>55485..55574, 55490..55573, 55902..55976, 55976..56335,<br>55977..56354, 55981..56352 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o18.tm   | Method  | TBLASTX:Maize       |
| Start    | 55171  | End     | 55768               |
| GI       | none   | Score   | 46                  |
| Exons    | 55171..55203, 55172..55204, 55182..55589, 55187..55591,<br>55190..55591, 55677..55700, 55678..55701, 55697..55744,<br>55699..55743, 55736..55768, 55740..55760 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o6.ts   | Method  | TBLASTX:Soybean     |
| Start    | 56362   | End     | 57898               |
| GI       | none  | Score   | 332                 |
| Exons    | 56362..56679, 56382..56687, 56908..57117, 56914..57897,<br>56915..57898 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o55.tc | Method  | TBLASTX:Cress       |
| Start    | 56374                      | End     | 56591               |
| GI       | none                       | Score   | 228                 |
| Exons    | 56374..56589, 56376..56591 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o4.tc   | Method  | TBLASTX:Cress       |
| Start    | 56592   | End     | 57858               |
| GI       | none  | Score   | 91                  |
| Exons    | 56592..56672, 56593..56664, 56894..57694, 56908..57117,<br>56915..57703, 57800..57856, 57800..57856, 57808..57858 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o16.tw  | Method  | TBLASTX:Wheat       |
| Start    | 56683   | End     | 57109               |
| GI       | none  | Score   | 39                  |
| Exons    | 56683..56709, 56684..56719, 56685..56723, 56697..56774,<br>56713..56784, 56714..56833, 56729..56854, 56769..56981,<br>56787..56951, 56789..56980, 56794..56982, 56881..56982,<br>56984..57109, 56987..57106, 56989..57108 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088 | Strand  | -                   |
| Start    | 64702 | End     | 67526               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Name     | OJ990605_36.9919.C1.o23.tm   | Method  | TBLASTX:Maize       |
| Start    | 56735  | End     | 57215               |
| GI       | none   | Score   | 53                  |
| Exons    | 56735..56773, 56736..56771, 56737..56781, 56770..57117, 56771..57214, 56775..57215 |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o51.tm   | Method  | TBLASTX:Maize       |
| Start    | 57216  | End     | 57384               |
| GI       | none   | Score   | 273                 |
| Exons    | 57216..57383, 57217..57384, 57218..57382   |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o30.tw   | Method  | TBLASTX:Wheat       |
| Start    | 57441  | End     | 57557               |
| GI       | none   | Score   | 205                 |
| Exons    | 57441..57557, 57443..57556   |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o18.tw   | Method  | TBLASTX:Wheat       |
| Start    | 57676  | End     | 58003               |
| GI       | none   | Score   | 377                 |
| Exons    | 57676..57939, 57683..58003, 57683..58003   |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o40.tc   | Method  | TBLASTX:Cress       |
| Start    | 58822  | End     | 59159               |
| GI       | none   | Score   | 273                 |
| Exons    | 58822..59067, 58825..59067, 59106..59159, 59107..59157                             |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o35.tm   | Method  | TBLASTX:Maize       |
| Start    | 58876  | End     | 59159               |
| GI       | none   | Score   | 364                 |
| Exons    | 58876..59091, 58876..59130, 59091..59159, 59092..59157, 59093..59158               |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o10.tw   | Method  | TBLASTX:Wheat       |
| Start    | 59111  | End     | 59553               |
| GI       | none   | Score   | 667                 |
| Exons    | 59111..59551, 59112..59537, 59113..59553   |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 64702  | End    | 67526         |
| Name  | OJ990605_36.9919.C1.o14.tc   | Method | TBLASTX:Cress |
| Start | 59198  | End    | 59776         |
| GI    | none   | Score  | 74            |
| Exons | 59198..59251, 59199..59255, 59199..59255, 59200..59256,<br>59200..59256, 59257..59385, 59258..59386, 59259..59387,<br>59388..59669, 59391..59657, 59392..59670, 59393..59665,<br>59393..59674, 59669..59701, 59673..59702, 59705..59776,<br>59709..59771 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o66.tm   | Method  | TBLASTX:Maize       |
| Start    | 59618  | End     | 59770               |
| GI       | none   | Score   | 89                  |
| Exons    | 59618..59671, 59618..59665, 59619..59687, 59620..59679,<br>59666..59725, 59673..59726, 59673..59726, 59726..59770,<br>59729..59770 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o22.tw  | Method  | TBLASTX:Wheat       |
| Start    | 59631   | End     | 60032               |
| GI       | none  | Score   | 79                  |
| Exons    | 59631..59681, 59631..59705, 59632..59682, 59652..59867,<br>59664..59867, 59861..60007, 59886..60029, 59907..60032 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o65.tm  | Method  | TBLASTX:Maize       |
| Start    | 59806   | End     | 60214               |
| GI       | none  | Score   | 58                  |
| Exons    | 59806..59877, 59824..59877, 59828..59884, 59829..59882,<br>59857..59949, 59889..59945, 59890..59949, 59943..59984,<br>59961..60023, 59964..60026, 60030..60107, 60031..60102,<br>60031..60111, 60137..60214, 60139..60201 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o13.tw   | Method  | TBLASTX:Wheat       |
| Start    | 60394  | End     | 60990               |
| GI       | none   | Score   | 136                 |
| Exons    | 60394..60522, 60398..60523, 60399..60494, 60401..60523,<br>60547..60588, 60562..60627, 60581..60664, 60586..60663,<br>60638..60715, 60666..60713, 60667..60717, 60668..60715,<br>60700..60825, 60701..60826, 60705..60824, 60713..60826,<br>60814..60990, 60819..60989 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o12.tm | Method  | TBLASTX:Maize       |
| Start    | 60556                      | End     | 61299               |



|          |  |         |                     |
|----------|--|---------|---------------------|
| GI       | none   | Score   | 139                 |
| Exons    | 60556..60714, 60581..60706, 60583..60732, 60588..60728,<br>60701..60787, 60702..60785, 60781..60951, 60783..60953,<br>60968..61000, 60969..61022, 60995..61021, 61003..61032,<br>61019..61126, 61020..61088, 61021..61095, 61083..61265,<br>61084..61299, 61086..61292, 61087..61293 |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o49.tc   | Method  | TBLASTX:Cress       |
| Start    | 60883  | End     | 61225               |
| GI       | none   | Score   | 74                  |
| Exons    | 60883..60969, 60885..60950, 61025..61090, 61028..61090,<br>61100..61225, 61111..61221  |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o35.ts   | Method  | TBLASTX:Soybean     |
| Start    | 61025  | End     | 61240               |
| GI       | none   | Score   | 230                 |
| Exons    | 61025..61090, 61084..61239, 61085..61240   |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o24.tw   | Method  | TBLASTX:Wheat       |
| Start    | 61761  | End     | 62149               |
| GI       | none   | Score   | 83                  |
| Exons    | 61761..61820, 61761..61820, 61762..61821, 61762..61839,<br>61803..61841, 61817..61840, 61864..62112, 61868..62134,<br>61874..62149   |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o32.tm   | Method  | TBLASTX:Maize       |
| Start    | 61845  | End     | 62161               |
| GI       | none   | Score   | 264                 |
| Exons    | 61845..62027, 61845..62141, 61846..62154, 61847..62161,<br>61847..62161  |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o32.ts   | Method  | TBLASTX:Soybean     |
| Start    | 61920  | End     | 63283               |
| GI       | none   | Score   | 168                 |
| Exons    | 61920..62027, 61922..62074, 61922..62074, 62470..62634,<br>62480..62710, 62493..62723, 62507..62710, 62973..63044,<br>62975..63037, 62981..63025, 63032..63094, 63104..63274,<br>63106..63270, 63106..63279, 63122..63283  |         |                     |
|          |  |         |                     |
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990605_36.9919.C1.o58.tc                             | Method | TBLASTX:Cress |
| Start | 61923  | End    | 62083         |
| GI    | none   | Score  | 165           |
| Exons | 61923..62027, 61923..62069, 61924..62070, 61925..62083 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o42.tm   | Method  | TBLASTX:Maize       |
| Start    | 62344  | End     | 62681               |
| GI       | none   | Score   | 94                  |
| Exons    | 62344..62427, 62434..62643, 62445..62681, 62477..62677, 62487..62681 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o44.tc   | Method  | TBLASTX:Cress       |
| Start    | 62493  | End     | 63426               |
| GI       | none   | Score   | 280                 |
| Exons    | 62493..62711, 62510..62710, 62978..63025, 63002..63094, 63106..63270, 63106..63270, 63122..63283, 63328..63426 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o52.tc   | Method  | TBLASTX:Cress       |
| Start    | 64025  | End     | 64602               |
| GI       | none   | Score   | 37                  |
| Exons    | 64025..64054, 64091..64126, 64094..64123, 64116..64175, 64129..64176, 64212..64298, 64213..64287, 64304..64402, 64305..64448, 64387..64449, 64485..64529, 64488..64529, 64558..64602 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o26.ts   | Method  | TBLASTX:Soybean     |
| Start    | 64121  | End     | 65170               |
| GI       | none   | Score   | 73                  |
| Exons    | 64121..64171, 64129..64179, 64205..64246, 64209..64286, 64210..64236, 64248..64292, 64282..64350, 64303..64347, 64304..64357, 64347..64412, 64353..64445, 64354..64446, 64387..64458, 64541..64606, 64548..64601, 64654..64815, 64657..64833, 64682..64816, 64818..64862, 64836..64862, 65013..65168, 65013..65168, 65021..65170, 65023..65169 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o55.tm                             | Method  | TBLASTX:Maize       |
| Start    | 64512  | End     | 64700               |
| GI       | none   | Score   | 62                  |
| Exons    | 64512..64538, 64514..64540, 64542..64700, 64544..64699 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088 | Strand  | -                   |

|       |   |        |               |
|-------|---|--------|---------------|
| Start | 64702   | End    | 67526         |
| Name  | OJ990605_36.9919.C1.o5.tm   | Method | TBLASTX:Maize |
| Start | 64701   | End    | 65707         |
| GI    | none  | Score  | 106           |
| Exons | 64701..64766, 64701..64829, 64702..64833, 64702..64833,<br>64703..64834, 64821..64865, 64827..64865, 64834..64866,<br>64866..64889, 64867..64893, 64867..64893, 64896..65705,<br>64901..65707, 64902..65684 |        |               |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No.    | 46088  | Strand  | -                   |
| Start       | 64702  | End     | 67526               |
| Name        | OJ990605_36.9919.C1.o30.gp   | Method  | AAT/GAP             |
| Start       | 64702  | End     | 64869               |
| GI          | LIB3431-017-P1-K1-H4   | Score   | 283                 |
| Exons       | 64702..64869   |         |                     |
| GI Descrip. | '1173189/sp P12340 RR12_MAIZE 8.0e-18 CHLOROPLAST 30S RIBOSOMAL<br>PROTEIN S12 >gi_2119091_pir_S58629 ribosomal protein S12 -<br>maize chloroplast >gi_342619 (M17841) ribosomal protein S12 [Zea<br>mays] >gi_1216141_emb_CAA60309_ (X86563) ribosomal protein S12<br>[Zea mays]' |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o19.ts  | Method  | TBLASTX:Soybean     |
| Start    | 65172   | End     | 65662               |
| GI       | none  | Score   | 309                 |
| Exons    | 65172..65600, 65181..65600, 65182..65601, 65183..65620,<br>65429..65620, 65639..65662 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o23.tc               | Method  | TBLASTX:Cress       |
| Start    | 65190                                    | End     | 65620               |
| GI       | none                                     | Score   | 351                 |
| Exons    | 65190..65600, 65191..65601, 65234..65620 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088   | Strand  | -                   |
| Start    | 64702   | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o33.tm  | Method  | TBLASTX:Maize       |
| Start    | 65917   | End     | 66207               |
| GI       | none  | Score   | 167                 |
| Exons    | 65917..66033, 65917..66033, 66024..66206, 66036..66203,<br>66037..66207 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o62.tc | Method  | TBLASTX:Cress       |
| Start    | 66086                      | End     | 66365               |
| GI       | none                       | Score   | 166                 |
| Exons    | 66086..66358, 66099..66365 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22135 | Seq. ID | OJ990605_36.9919.C1 |
|----------|-------|---------|---------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46088  | Strand | -             |
| Start    | 64702  | End    | 67526         |
| Name     | OJ990605_36.9919.C1.o11.tc   | Method | TBLASTX:Cress |
| Start    | 66542  | End    | 67092         |
| GI       | none   | Score  | 206           |
| Exons    | 66542..66688, 66543..66710, 66549..66689, 66684..67088, 66687..67088, 66728..67084, 66877..67092 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o7.tw  | Method  | TBLASTX:Wheat       |
| Start    | 66650  | End     | 67081               |
| GI       | none   | Score   | 691                 |
| Exons    | 66650..66694, 66651..67079, 66651..67079, 66728..67081, 66877..67080 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o58.tm                             | Method  | TBLASTX:Maize       |
| Start    | 66687  | End     | 66896               |
| GI       | none   | Score   | 221                 |
| Exons    | 66687..66827, 66687..66824, 66688..66825, 66831..66896 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135  | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088  | Strand  | -                   |
| Start    | 64702  | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o13.ts   | Method  | TBLASTX:Soybean     |
| Start    | 66759  | End     | 67203               |
| GI       | none   | Score   | 694                 |
| Exons    | 66759..67199, 66760..67203, 66760..67065, 66761..67198, 67102..67203 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22135                      | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                      | Strand  | -                   |
| Start    | 64702                      | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o26.tm | Method  | TBLASTX:Maize       |
| Start    | 66899                      | End     | 67213               |
| GI       | none                       | Score   | 567                 |
| Exons    | 66899..67213, 66900..67211 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22135                                    | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46088                                    | Strand  | -                   |
| Start    | 64702                                    | End     | 67526               |
| Name     | OJ990605_36.9919.C1.o30.tc               | Method  | TBLASTX:Cress       |
| Start    | 67093                                    | End     | 67364               |
| GI       | none                                     | Score   | 455                 |
| Exons    | 67093..67332, 67095..67364, 67095..67364 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22135   | Seq. ID | OJ990605_36.9919.C1 |
| Gene No. | 46089   | Strand  | -                   |
| Start    | 67587   | End     | 67905               |
| Name     | OJ990605_36.9919.C1.o56.tc                              | Method  | TBLASTX:Cress       |
| Start    | 67587   | End     | 67905               |
| GI       | none  | Score   | 75                  |
| Exons    | 67587..67670, 67590..67667, 67591..67671, 67592..67672, |         |                     |

67704..67784, 67704..67784, 67783..67905, 67784..67876

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46090 Strand +  
Start 957 End 1463  
Name OJ990605\_36.9919.C2.o3.gp Method AAT/GAP  
Start 957 End 1463  
GI uC-osflcyp011b01b1 Score 987  
Exons 957..1463  
GI Descrip. '343210 5.0e-78 (M35995) apocytochrome b6 (alt.) [Oryza sativa]  
>gi\_226762\_prf\_\_1604469A cytochrome b6 [Oryza sativa]'

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46091 Strand +  
Start 7483 End 8587  
Name OJ990605\_36.9919.C2.o8.gp Method AAT/GAP  
Start 7483 End 8587  
GI 2291\_1.R1084 Score 2153  
Exons 7483..8587  
GI Descrip. '133936/sp|P12146|RR3\_ORYSA 3.0e-27 CHLOROPLAST 30S RIBOSOMAL  
PROTEIN S3 >gi\_70867\_pir\_R3RZ3 ribosomal protein S3 - rice  
chloroplast >gi\_12025\_emb\_CAA33934\_(X15901) ribosomal protein  
S3 [Oryza sativa] >gi\_226646\_prf\_\_1603356BW ribosomal protein S3  
[Oryza sativa]'

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46092 Strand +  
Start 8602 End 10074  
Name OJ990605\_36.9919.C2.o9.gp Method AAT/GAP  
Start 8602 End 10074  
GI 3073\_1.R1084 Score 2931  
Exons 8602..10074  
GI Descrip. '133936/sp|P12146|RR3\_ORYSA 5.0e-95 CHLOROPLAST 30S RIBOSOMAL  
PROTEIN S3 >gi\_70867\_pir\_R3RZ3 ribosomal protein S3 - rice  
chloroplast >gi\_12025\_emb\_CAA33934\_(X15901) ribosomal protein  
S3 [Oryza sativa] >gi\_226646\_prf\_\_1603356BW ribosomal protein S3  
[Oryza sativa]'

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46093 Strand -  
Start 56 End 507  
Name OJ990605\_36.9919.C2.o1.gp Method AAT/GAP  
Start 56 End 507  
GI uC-osflcyp003h11b1 Score 872  
Exons 56..507  
GI Descrip. '131332/sp|P09449|PSBH\_ORYSA 1.0e-09 PHOTOSYSTEM II 10 KD  
PHOSPHOPROTEIN >gi\_72716\_pir\_F2RZOP photosystem II  
phosphoprotein psbH - rice chloroplast >gi\_11953\_emb\_CAA31204\_  
(X12695) 10 kD phosphoprotein (AA 1 - 73) [Oryza sativa]  
>gi\_12016\_emb\_CAA33976\_(X15901) PSII 10kDa phosphoprotein  
[Oryza sativa] >gi\_226635\_prf\_\_1603356BJ photosystem II 10kD  
phosphoprotein [Oryza sativa]'

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46094 Strand -  
Start 637 End 800  
Name OJ990605\_36.9919.C2.o2.gp Method AAT/GAP

|             |  |       |     |
|-------------|--|-------|-----|
| Start       | 637  | End   | 800 |
| GI          | uC-osflcyp084g07a1   | Score | 201 |
| Exons       | 637..800   |       |     |
| GI Descrip. | '11957/emb X15901 CHOSXX 7.0e-38 Rice complete chloroplast genome' |       |     |

  

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No.    | 46095  | Strand  | -                   |
| Start       | 3938   | End     | 4503                |
| Name        | OJ990605_36.9919.C2.o4.gp  | Method  | AAT/GAP             |
| Start       | 3938   | End     | 4503                |
| GI          | 2798177  | Score   | 1010                |
| Exons       | 3938..4503   |         |                     |
| GI Descrip. | 5881726/dbj BAA84417.1  3.0e-24 (AP000423) RNA polymerase alpha subunit [Arabidopsis thaliana] |         |                     |

  

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No.    | 46096   | Strand  | -                   |
| Start       | 5286  | End     | 5676                |
| Name        | OJ990605_36.9919.C2.o5.gp   | Method  | AAT/GAP             |
| Start       | 5286  | End     | 5676                |
| GI          | 5003883   | Score   | 782                 |
| Exons       | 5286..5676  |         |                     |
| GI Descrip. | 11957/emb X15901 CHOSXX 1.0e-166 Rice complete chloroplast genome |         |                     |

  

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No.    | 46097   | Strand  | -                   |
| Start       | 6247  | End     | 6832                |
| Name        | OJ990605_36.9919.C2.o6.gp   | Method  | AAT/GAP             |
| Start       | 6247  | End     | 6832                |
| GI          | 481 1.R1084   | Score   | 1023                |
| Exons       | 6247..6832  |         |                     |
| GI Descrip. | '132672/sp P12137 RK14_ORYSA 6.0e-57 CHLOROPLAST; 50S RIBOSOMAL PROTEIN L14 >gi_71224_pir_R5RZ14 ribosomal protein L14 - rice chloroplast >gi_12023_emb_CAA33932_ (X15901) ribosomal protein L14 [Oryza sativa] >gi_226644_prf__1603356BU ribosomal protein L14 [Oryza sativa]' |         |                     |

  

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No.    | 46098   | Strand  | -                   |
| Start       | 7137  | End     | 7400                |
| Name        | OJ990605_36.9919.C2.o7.gp   | Method  | AAT/GAP             |
| Start       | 7137  | End     | 7400                |
| GI          | LIB3432-015-P1-K1-H8  | Score   | 450                 |
| Exons       | 7137..7400  |         |                     |
| GI Descrip. | '11957/emb X15901 CHOSXX 1.0e-129 Rice complete chloroplast genome' |         |                     |

  

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o10.tm  | Method  | TBLASTX:Maize       |
| Start    | 1   | End     | 460                 |
| GI       | none  | Score   | 304                 |
| Exons    | 1..201, 1..207, 2..202, 108..218, 187..264, 198..263, 198..269, 239..268, 256..306, 256..306, 257..307, 297..428, 308..340, |         |                     |

312..392, 386..427, 394..429, 421..456, 434..460

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22136                              | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099                              | Strand  | -                   |
| Start    | 17169                              | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o12.ts         | Method  | TBLASTX:Soybean     |
| Start    | 1                                  | End     | 289                 |
| GI       | none                               | Score   | 249                 |
| Exons    | 1..153, 2..166, 238..288, 239..289 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o2.tc  | Method  | TBLASTX:Cress       |
| Start    | 1  | End     | 1974                |
| GI       | none   | Score   | 245                 |
| Exons    | 1..153, 2..166, 237..263, 1094..1588, 1097..1744, 1099..1761, 1105..1743, 1797..1868, 1799..1867, 1802..1876, 1920..1973, 1920..1973, 1936..1974 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 590  | End     | 1836                |
| GI       | none   | Score   | 57                  |
| Exons    | 590..634, 636..689, 638..688, 696..734, 698..730, 1015..1059, 1016..1078, 1016..1075, 1055..1771, 1067..1588, 1105..1770, 1800..1829, 1801..1836 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22136                              | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099                              | Strand  | -                   |
| Start    | 17169                              | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o6.tm          | Method  | TBLASTX:Maize       |
| Start    | 1100                               | End     | 1744                |
| GI       | none                               | Score   | 961                 |
| Exons    | 1100..1744, 1103..1570, 1162..1743 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o14.tm                                 | Method  | TBLASTX:Maize       |
| Start    | 1910   | End     | 2151                |
| GI       | none   | Score   | 290                 |
| Exons    | 1910..2104, 1911..2102, 2106..2150, 2107..2148, 2107..2151 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o4.ts  | Method  | TBLASTX:Soybean     |
| Start    | 2059   | End     | 3621                |
| GI       | none   | Score   | 75                  |
| Exons    | 2059..2151, 2059..2178, 2154..2300, 2210..2299, 2316..2342, 2419..2466, 2425..2466, 2578..3033, 2596..3165, 2603..3142, 2603..3169, 2613..3167, 3073..3171, 3190..3270, 3213..3269, 3425..3601, 3427..3621 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22136                              | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099                              | Strand  | -                   |
| Start    | 17169                              | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o13.tc         | Method  | TBLASTX:Cress       |
| Start    | 2595                               | End     | 2842                |
| GI       | none                               | Score   | 367                 |
| Exons    | 2595..2690, 2596..2841, 2609..2842 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22136                              | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099                              | Strand  | -                   |
| Start    | 17169                              | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o15.tc         | Method  | TBLASTX:Cress       |
| Start    | 2843                               | End     | 3048                |
| GI       | none                               | Score   | 316                 |
| Exons    | 2843..3046, 2843..3046, 2845..3048 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o16.tc   | Method  | TBLASTX:Cress       |
| Start    | 3448   | End     | 3890                |
| GI       | none   | Score   | 36                  |
| Exons    | 3448..3513, 3499..3537, 3504..3542, 3554..3598, 3641..3877, 3650..3877, 3696..3890, 3748..3879, 3759..3890 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o3.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 3641   | End     | 4405                |
| GI       | none   | Score   | 523                 |
| Exons    | 3641..4351, 3641..4405, 3648..4376, 3712..4398 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22136                     | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099                     | Strand  | -                   |
| Start    | 17169                     | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o7.tm | Method  | TBLASTX:Maize       |
| Start    | 3839                      | End     | 4313                |
| GI       | none                      | Score   | 662                 |
| Exons    | 3839..4312, 3840..4313    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o7.tc  | Method  | TBLASTX:Cress       |
| Start    | 4133   | End     | 4720                |
| GI       | none   | Score   | 295                 |
| Exons    | 4133..4405, 4137..4376, 4388..4447, 4420..4464, 4420..4464, 4447..4620, 4453..4587, 4461..4622, 4461..4631, 4490..4645, 4622..4720, 4623..4718, 4624..4719 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22136                      | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099                      | Strand  | -                   |
| Start    | 17169                      | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o15.tm | Method  | TBLASTX:Maize       |
| Start    | 4321                       | End     | 4583                |
| GI       | none                       | Score   | 51                  |



Exons 4321..4395, 4340..4399, 4341..4379, 4342..4395, 4449..4577,  
4462..4578, 4462..4578, 4464..4583, 4490..4582

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o11.tm Method TBLASTX:Maize  
Start 4600 End 4887  
GI none Score 188  
Exons 4600..4713, 4601..4717, 4601..4717, 4715..4885, 4716..4886,  
4717..4887, 4718..4885

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o14.ts Method TBLASTX:Soybean  
Start 4675 End 4927  
GI none Score 91  
Exons 4675..4767, 4676..4846, 4685..4846, 4826..4927, 4827..4919,  
4831..4920

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o2.tm Method TBLASTX:Maize  
Start 4888 End 6405  
GI none Score 38  
Exons 4888..4920, 4889..4939, 4912..4995, 4932..4994, 4944..5021,  
4951..5022, 5006..5023, 5040..5279, 5043..5264, 5062..5280,  
5286..5564, 5287..5565, 5303..5566, 5307..5567, 5315..5365,  
5339..5617, 5350..5628, 5572..5613, 5573..5611, 5575..5655,  
5663..5707, 5668..5721, 5670..5720, 5739..5822, 5740..6387,  
5740..6270, 5759..6403, 5970..6404, 6343..6405

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o15.ts Method TBLASTX:Soybean  
Start 5372 End 5561  
GI none Score 174  
Exons 5372..5557, 5373..5561

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o3.tw Method TBLASTX:Wheat  
Start 5663 End 6121  
GI none Score 45  
Exons 5663..5707, 5669..5707, 5670..5720, 5718..5738, 5739..5819,  
5740..6114, 5759..6112, 5759..6121, 5844..6113

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o1.ts Method TBLASTX:Soybean  
Start 5752 End 11458  
GI none Score 158

Exons 5752..5916, 5752..5964, 5759..5968, 5759..5986, 5959..6165,  
5975..6166, 5979..6287, 5981..6202, 6200..6226, 6243..6308,  
6294..6596, 6305..6595, 6414..6608, 6584..6685, 6591..6710,  
6771..7004, 6787..7149, 6787..7182, 6801..7190, 6806..7192,  
7053..7187, 8415..8555, 8416..8796, 8417..8785, 8800..8907,  
8970..9104, 8971..9120, 8971..9120, 9030..9125, 9115..9144,  
9725..9877, 9729..9962, 9739..9963, 9739..9963, 9967..9993,  
9968..9991, 10188..10532, 10241..10531, 10242..10571,  
10297..10536, 10477..10686, 10504..10701, 10604..10702,  
10673..10744, 10684..10782, 10695..10820, 10731..10787,  
10779..10823, 10781..10822, 10782..10823, 10823..11002,  
10825..11001, 10826..11053, 11007..11084, 11008..11085,  
11063..11458, 11077..11370

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o8.tc Method TBLASTX:Cress  
Start 5752 End 6272  
GI none Score 156  
Exons 5752..5964, 5755..5925, 5759..5956, 5959..6168, 5972..6166,  
5981..6175, 5986..6174, 6190..6231, 6191..6223, 6234..6272

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o9.tw Method TBLASTX:Wheat  
Start 6193 End 6557  
GI none Score 60  
Exons 6193..6228, 6194..6232, 6202..6270, 6212..6268, 6214..6270,  
6279..6557, 6279..6554, 6296..6556

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o12.tc Method TBLASTX:Cress  
Start 6298 End 6685  
GI none Score 114  
Exons 6298..6498, 6299..6502, 6306..6503, 6503..6550, 6503..6595,  
6504..6596, 6571..6603, 6584..6685, 6591..6683

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o5.tm Method TBLASTX:Maize  
Start 6446 End 8285  
GI none Score 75  
Exons 6446..6490, 6447..6491, 6491..7192, 6492..7187, 8229..8285

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o6.tw Method TBLASTX:Wheat  
Start 6710 End 7101  
GI none Score 80  
Exons 6710..6763, 6712..6762, 6714..6767, 6717..7100, 6718..7101

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o9.tc  | Method  | TBLASTX:Cress       |
| Start    | 6719   | End     | 7192                |
| GI       | none   | Score   | 48                  |
| Exons    | 6719..6751, 6825..6890, 6870..7190, 6871..7146, 6881..7192, 6885..7184 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o10.tw   | Method  | TBLASTX:Wheat       |
| Start    | 7133   | End     | 15285               |
| GI       | none   | Score   | 131                 |
| Exons    | 7133..7207, 7134..7208, 7178..7303, 7204..7308, 7208..7303, 7213..7338, 7322..7345, 7324..7347, 7346..7393, 7378..7458, 7389..7451, 7505..7537, 7506..7538, 15199..15285 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o12.tm                                 | Method  | TBLASTX:Maize       |
| Start    | 7502   | End     | 7825                |
| GI       | none   | Score   | 352                 |
| Exons    | 7502..7750, 7503..7751, 7510..7821, 7513..7806, 7757..7825 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o10.tc   | Method  | TBLASTX:Cress       |
| Start    | 7541   | End     | 8775                |
| GI       | none   | Score   | 49                  |
| Exons    | 7541..7582, 7549..7569, 7601..7663, 7619..7663, 7656..7745, 7657..7746, 7660..7752, 7873..7899, 7895..7939, 8048..8110, 8221..8262, 8232..8279, 8352..8594, 8359..8730, 8401..8775, 8402..8758 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o5.tw  | Method  | TBLASTX:Wheat       |
| Start    | 7625   | End     | 8259                |
| GI       | none   | Score   | 202                 |
| Exons    | 7625..7783, 7626..7775, 7627..7803, 7750..7836, 7751..7837, 7760..7834, 7822..7935, 7831..7938, 7836..7943, 7945..8154, 7953..8132, 8012..8182, 8022..8192, 8036..8182, 8212..8259, 8226..8258 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o13.tm  | Method  | TBLASTX:Maize       |
| Start    | 7866  | End     | 8189                |
| GI       | none  | Score   | 59                  |
| Exons    | 7866..7895, 7867..7902, 7867..7899, 7892..7933, 7892..7939, 7896..7994, 7897..8154, 7897..8067, 8024..8182, 8025..8132, |         |                     |

8028..8189, 8036..8170, 8122..8181

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o3.tm Method TBLASTX:Maize  
Start 8329 End 10091  
GI none Score 37  
Exons 8329..8361, 8338..8910, 8340..8558, 8353..8751, 8360..8908,  
8803..8910, 8863..9141, 8905..9144, 9124..9582, 9136..9582,  
9530..9643, 9574..9648, 9591..9647, 9593..9697, 9662..9880,  
9681..9995, 9690..9959, 9697..9996, 9926..10000, 9932..10000,  
9961..10050, 9987..10046, 9989..10090, 10002..10091

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o1.tw Method TBLASTX:Wheat  
Start 8811 End 9576  
GI none Score 137  
Exons 8811..8906, 8812..9144, 8812..9141, 9175..9573, 9181..9576

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o11.tc Method TBLASTX:Cress  
Start 9006 End 9522  
GI none Score 129  
Exons 9006..9104, 9007..9117, 9014..9118, 9021..9119, 9168..9275,  
9190..9486, 9199..9522

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o13.ts Method TBLASTX:Soybean  
Start 9197 End 9525  
GI none Score 137  
Exons 9197..9487, 9199..9525, 9211..9492

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o5.tc Method TBLASTX:Cress  
Start 9864 End 10728  
GI none Score 92  
Exons 9864..9962, 9865..9963, 9867..9956, 10102..10152, 10103..10153,  
10103..10180, 10104..10160, 10105..10170, 10154..10183,  
10154..10183, 10240..10407, 10242..10409, 10242..10412,  
10297..10413, 10423..10671, 10427..10666, 10435..10728,  
10604..10672

Seq. No. 22136 Seq. ID OJ990605\_36.9919.C2  
Gene No. 46099 Strand -  
Start 17169 End 20033  
Name OJ990605\_36.9919.C2.o9.tm Method TBLASTX:Maize  
Start 10275 End 11103  
GI none Score 135

Exons 10275..10382, 10298..10381, 10299..10382, 10729..11103,  
10730..11095, 10731..11096, 10957..11097

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 10384  | End     | 12102               |
| GI       | none   | Score   | 400                 |
| Exons    | 10384..10671, 10384..10728, 11327..11536, 11329..11577,<br>11332..11577, 11406..11579, 11513..11578, 11572..12102,<br>11581..12102 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o8.tw   | Method  | TBLASTX:Wheat       |
| Start    | 10413   | End     | 10720               |
| GI       | none  | Score   | 343                 |
| Exons    | 10413..10676, 10413..10718, 10414..10719, 10414..10719,<br>10604..10720 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 11007  | End     | 12226               |
| GI       | none   | Score   | 79                  |
| Exons    | 11007..11048, 11009..11182, 11009..11203, 11085..11216,<br>11202..11315, 11203..11319, 11204..11323, 11327..11536,<br>11329..12042, 11332..12042, 12029..12127, 12039..12134,<br>12043..12135, 12047..12133, 12061..12135, 12136..12216,<br>12140..12226, 12141..12224 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o6.ts                              | Method  | TBLASTX:Soybean     |
| Start    | 11459  | End     | 12036               |
| GI       | none   | Score   | 107                 |
| Exons    | 11459..11536, 11461..12036, 11463..11720, 11464..12030 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o2.tw   | Method  | TBLASTX:Wheat       |
| Start    | 11697   | End     | 12074               |
| GI       | none  | Score   | 51                  |
| Exons    | 11697..11723, 11697..12047, 11698..12072, 11698..12072,<br>11699..12073, 11772..12074 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22136                      | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099                      | Strand  | -                   |
| Start    | 17169                      | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o12.tw | Method  | TBLASTX:Wheat       |
| Start    | 12075                      | End     | 12302               |
| GI       | none                       | Score   | 104                 |

Exons 12075..12134, 12077..12133, 12141..12302, 12156..12302

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o14.tc   | Method  | TBLASTX:Cress       |
| Start    | 12456  | End     | 12864               |
| GI       | none   | Score   | 61                  |
| Exons    | 12456..12500, 12460..12495, 12487..12648, 12501..12650, 12502..12648, 12635..12730, 12645..12731, 12645..12758, 12646..12732, 12733..12864, 12735..12815, 12742..12822 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o16.ts                             | Method  | TBLASTX:Soybean     |
| Start    | 12812  | End     | 12991               |
| GI       | none   | Score   | 52                  |
| Exons    | 12812..12841, 12814..12837, 12847..12987, 12851..12991 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o7.tw  | Method  | TBLASTX:Wheat       |
| Start    | 14160  | End     | 14646               |
| GI       | none   | Score   | 92                  |
| Exons    | 14160..14237, 14160..14237, 14161..14238, 14161..14238, 14238..14282, 14239..14295, 14239..14295, 14270..14350, 14275..14352, 14277..14354, 14286..14348, 14302..14367, 14312..14380, 14313..14354, 14340..14360, 14365..14415, 14365..14406, 14366..14458, 14366..14416, 14405..14644, 14412..14645, 14464..14646, 14599..14646 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o7.ts  | Method  | TBLASTX:Soybean     |
| Start    | 14441  | End     | 14934               |
| GI       | none   | Score   | 684                 |
| Exons    | 14441..14932, 14451..14849, 14453..14932, 14599..14934, 14812..14934 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o11.ts                             | Method  | TBLASTX:Soybean     |
| Start    | 16140  | End     | 16366               |
| GI       | none   | Score   | 347                 |
| Exons    | 16140..16364, 16140..16364, 16142..16366, 16142..16366 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o8.ts                               | Method  | TBLASTX:Soybean     |
| Start    | 16367   | End     | 16819               |
| GI       | none  | Score   | 448                 |
| Exons    | 16367..16684, 16371..16685, 16399..16686, 16672..16749, |         |                     |

16689..16748, 16702..16818, 16704..16817, 16733..16819,  
16733..16819

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136                                    | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099                                    | Strand  | -                   |
| Start    | 17169                                    | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o8.tm                | Method  | TBLASTX:Maize       |
| Start    | 16902                                    | End     | 17256               |
| GI       | none                                     | Score   | 564                 |
| Exons    | 16902..17219, 16903..17256, 16905..17255 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o5.ts  | Method  | TBLASTX:Soybean     |
| Start    | 16932  | End     | 17656               |
| GI       | none   | Score   | 59                  |
| Exons    | 16932..16979, 16935..16976, 16975..17205, 16979..17224,<br>16980..17219, 17230..17538, 17231..17476, 17277..17477,<br>17493..17537, 17529..17651, 17531..17656, 17531..17656 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22136  | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099  | Strand  | -                   |
| Start    | 17169  | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o6.tc  | Method  | TBLASTX:Cress       |
| Start    | 16944  | End     | 17466               |
| GI       | none   | Score   | 47                  |
| Exons    | 16944..16979; 16945..16983, 16947..16976, 16979..17224,<br>16980..17207, 16981..17232, 17229..17351, 17230..17343,<br>17231..17365, 17343..17369, 17359..17466, 17361..17453 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No.    | 46099   | Strand  | -                   |
| Start       | 17169   | End     | 20033               |
| Name        | OJ990605_36.9919.C2.o10.gp  | Method  | AAT/GAP             |
| Start       | 17169   | End     | 19137               |
| GI          | 183 5.R1084   | Score   | 2766                |
| Exons       | 17169..17553, 18093..19137  |         |                     |
| GI Descrip. | '133999/sp P05424 RR7_ORYSA 1.0e-48 CHLOROPLAST 30S RIBOSOMAL<br>PROTEIN S7 >gi_70904_pir_R3R27 ribosomal protein S7 - rice<br>chloroplast >gi_12037_emb_CAA33942_ (X15901) ribosomal protein<br>S7 [Oryza sativa] >gi_12065_emb_CAA33919_ (X15901) ribosomal<br>protein S7 [Oryza sativa] >gi_226657_prf_1603356CH ribosomal<br>protein S7 [Oryza sativa]' |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 17258   | End     | 19135               |
| GI       | none  | Score   | 756                 |
| Exons    | 17258..17728, 17258..17788, 17277..17789, 17407..17793,<br>17771..18694, 17784..18167, 17786..18688, 18222..18695,<br>18603..18704, 18750..18833, 18751..18834, 18772..18834,<br>18776..18835, 18828..19127, 18830..19135, 18833..19135 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22136 | Seq. ID | OJ990605_36.9919.C2 |
|----------|-------|---------|---------------------|

|          |   |         |                     |
|----------|---|---------|---------------------|
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o11.tw  | Method  | TBLASTX:Wheat       |
| Start    | 17333   | End     | 17552               |
| GI       | none  | Score   | 99                  |
| Exons    | 17333..17443, 17336..17416, 17337..17420, 17400..17531, 17402..17515, 17519..17551, 17520..17552  |         |                     |
|          |   |         |                     |
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o17.tc  | Method  | TBLASTX:Cress       |
| Start    | 17513   | End     | 17673               |
| GI       | none  | Score   | 194                 |
| Exons    | 17513..17668, 17524..17634, 17531..17668, 17533..17673  |         |                     |
|          |   |         |                     |
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o9.ts   | Method  | TBLASTX:Soybean     |
| Start    | 17658   | End     | 18059               |
| GI       | none  | Score   | 178                 |
| Exons    | 17658..17780, 17659..17781, 17659..17781, 17709..17804, 17792..17905, 17792..17905, 17904..18059, 17906..18058  |         |                     |
|          |   |         |                     |
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o4.tw   | Method  | TBLASTX:Wheat       |
| Start    | 17927   | End     | 18337               |
| GI       | none  | Score   | 42                  |
| Exons    | 17927..17986, 17978..18337, 17993..18334  |         |                     |
|          |   |         |                     |
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o3.tc   | Method  | TBLASTX:Cress       |
| Start    | 17946   | End     | 18695               |
| GI       | none  | Score   | 365                 |
| Exons    | 17946..18167, 17946..18434, 17947..18468, 17948..18424, 17948..18469, 18419..18535, 18423..18536, 18424..18450, 18427..18543, 18428..18544, 18480..18548, 18512..18586, 18517..18618, 18550..18597, 18587..18661, 18603..18671, 18613..18657, 18647..18688, 18653..18694, 18675..18695  |         |                     |
|          |   |         |                     |
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o10.ts  | Method  | TBLASTX:Soybean     |
| Start    | 18217   | End     | 19330               |
| GI       | none  | Score   | 308                 |
| Exons    | 18217..18417, 18218..18424, 18401..18523, 18433..18528, 18434..18523, 18480..18530, 18487..18534, 18550..18585, 18554..18586, 18586..18627, 18593..18628, 18616..18678, 18751..18816, 18753..18818, 18811..18837, 18812..18838, 18845..18949, 18872..18949, 18957..19049, 18976..19032, 19064..19102, 19163..19321, 19164..19319, 19165..19329, |         |                     |



19190..19330

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o18.tc  | Method  | TBLASTX:Cress       |
| Start    | 18755   | End     | 18976               |
| GI       | none  | Score   | 40                  |
| Exons    | 18755..18790, 18780..18821, 18792..18824, 18814..18951,<br>18815..18958, 18816..18947, 18817..18948, 18953..18976 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22136   | Seq. ID | OJ990605_36.9919.C2 |
| Gene No. | 46099   | Strand  | -                   |
| Start    | 17169   | End     | 20033               |
| Name     | OJ990605_36.9919.C2.o4.tc   | Method  | TBLASTX:Cress       |
| Start    | 18977   | End     | 20033               |
| GI       | none  | Score   | 110                 |
| Exons    | 18977..19072, 18977..19063, 19070..19096, 19070..19096,<br>19072..19101, 19163..19309, 19170..19301, 19204..19302,<br>19266..19337, 19356..19433, 19357..19437, 19357..19437,<br>19358..19438, 19430..19501, 19433..19501, 19434..19502,<br>19457..19564, 19471..19539, 19503..19565, 19561..19692,<br>19581..19697, 19583..19690, 19587..19745, 19637..19744,<br>19705..19749, 19763..19810, 19764..19940, 19765..19947,<br>19848..19949, 19850..19948, 19974..20033, 19976..20032 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22137  | Seq. ID | OJ990605_36.9919.C3 |
| Gene No.    | 46100  | Strand  | +                   |
| Start       | 1  | End     | 148                 |
| Name        | OJ990605_36.9919.C3.o1.gp  | Method  | AAT/GAP             |
| Start       | 1  | End     | 148                 |
| GI          | 24570_1.R1084  | Score   | 296                 |
| Exons       | 1..148   |         |                     |
| GI Descrip. | '131251/sp P12094 PSBA_ORYSA 8.0e-56 PHOTOSYSTEM Q(B) PROTEIN<br>(32 KD THYLAKOID MEMBRANE PROTEIN) (PHOTOSYSTEM II PROTEIN D1)<br>>gi_72661_pir_FMRZ32 photosystem II protein D1 precursor - rice<br>chloroplast >gi_11958_emb_CAA34007_(X15901) PSII 32kDa protein<br>[Oryza sativa] >gi_343212_(M36191) Q-B protein (psbA) [Oryza<br>sativa] >gi_226249_prf_1503143A psbA gene [Oryza sativa]<br>>gi_226406_prf_15' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22137   | Seq. ID | OJ990605_36.9919.C3 |
| Gene No.    | 46101   | Strand  | +                   |
| Start       | 512   | End     | 875                 |
| Name        | OJ990605_36.9919.C3.o2.gp   | Method  | AAT/GAP             |
| Start       | 512   | End     | 875                 |
| GI          | 5455469   | Score   | 666                 |
| Exons       | 512..875  |         |                     |
| GI Descrip. | 131251/sp P12094 PSBA_ORYSA 8.0e-56 PHOTOSYSTEM Q(B) PROTEIN (32<br>KD THYLAKOID MEMBRANE PROTEIN) (PHOTOSYSTEM II PROTEIN D1)<br>>gi_72661_pir_FMRZ32 photosystem II protein D1 precursor - rice<br>chloroplast >gi_11958_emb_CAA34007_(X15901) PSII 32kDa protein<br>[Oryza sativa] >gi_343212_(M36191) Q-B protein (psbA) [Oryza<br>sativa] >gi_226249_prf_1503143A psbA gene [Oryza sativa]<br>>gi_226406_prf_15' |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22137 | Seq. ID | OJ990605_36.9919.C3 |
|----------|-------|---------|---------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46102  | Strand | -             |
| Start    | 903  | End    | 1954          |
| Name     | OJ990605_36.9919.C3.o3.tc                              | Method | TBLASTX:Cress |
| Start    | 1  | End    | 382           |
| GI       | none   | Score  | 285           |
| Exons    | 1..153, 2..172, 138..185, 149..379, 155..382, 234..380 |        |               |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22137                     | Seq. ID | OJ990605_36.9919.C3 |
| Gene No. | 46102                     | Strand  | -                   |
| Start    | 903                       | End     | 1954                |
| Name     | OJ990605_36.9919.C3.o3.tm | Method  | TBLASTX:Maize       |
| Start    | 1                         | End     | 187                 |
| GI       | none                      | Score   | 346                 |
| Exons    | 1..186, 2..187            |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22137                     | Seq. ID | OJ990605_36.9919.C3 |
| Gene No. | 46102                     | Strand  | -                   |
| Start    | 903                       | End     | 1954                |
| Name     | OJ990605_36.9919.C3.o2.ts | Method  | TBLASTX:Soybean     |
| Start    | 71                        | End     | 436                 |
| GI       | none                      | Score   | 212                 |
| Exons    | 71..436, 230..415         |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22137                     | Seq. ID | OJ990605_36.9919.C3 |
| Gene No. | 46102                     | Strand  | -                   |
| Start    | 903                       | End     | 1954                |
| Name     | OJ990605_36.9919.C3.o2.tc | Method  | TBLASTX:Cress       |
| Start    | 470                       | End     | 838                 |
| GI       | none                      | Score   | 579                 |
| Exons    | 470..838, 470..820        |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22137  | Seq. ID | OJ990605_36.9919.C3 |
| Gene No.    | 46102  | Strand  | -                   |
| Start       | 903  | End     | 1954                |
| Name        | OJ990605_36.9919.C3.o3.gp  | Method  | AAT/GAP             |
| Start       | 903  | End     | 1321                |
| GI          | 3073_1.R1084   | Score   | 743                 |
| Exons       | 903..1321  |         |                     |
| GI Descrip. | '133936/sp P12146 RR3_ORYSA.5.0e-95 CHLOROPLAST 30S RIBOSOMAL PROTEIN S3 >gi_70867_pir_R3RZ3 ribosomal protein S3 - rice chloroplast >gi_12025_emb_CAA33934_(X15901) ribosomal protein S3 [Oryza sativa] >gi_226646_prf_1603356BW ribosomal protein S3 [Oryza sativa]' |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22137   | Seq. ID | OJ990605_36.9919.C3 |
| Gene No. | 46102   | Strand  | -                   |
| Start    | 903   | End     | 1954                |
| Name     | OJ990605_36.9919.C3.o2.tm   | Method  | TBLASTX:Maize       |
| Start    | 915   | End     | 1331                |
| GI       | none  | Score   | 197                 |
| Exons    | 915..1043, 934..1044, 943..1044, 1015..1245, 1043..1120, 1044..1217, 1045..1218, 1184..1246, 1201..1254, 1211..1273, 1212..1271, 1239..1331, 1270..1329 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22137 | Seq. ID | OJ990605_36.9919.C3 |
| Gene No. | 46102 | Strand  | -                   |
| Start    | 903   | End     | 1954                |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Name        | OJ990605_36.9919.C3.o1.ts   | Method  | TBLASTX:Soybean     |
| Start       | 982   | End     | 1954                |
| GI          | none  | Score   | 57                  |
| Exons       | 982..1044, 992..1036, 1044..1214, 1044..1214, 1482..1811, 1487..1600, 1488..1772, 1537..1776, 1717..1926, 1744..1926, 1766..1933, 1767..1943, 1913..1954, 1923..1952  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22137   | Seq. ID | OJ990605_36.9919.C3 |
| Gene No.    | 46102   | Strand  | -                   |
| Start       | 903   | End     | 1954                |
| Name        | OJ990605_36.9919.C3.o1.tc   | Method  | TBLASTX:Cress       |
| Start       | 1116  | End     | 1912                |
| GI          | none  | Score   | 87                  |
| Exons       | 1116..1214, 1119..1214, 1482..1652, 1485..1649, 1537..1653, 1663..1911, 1667..1906, 1668..1907, 1675..1911, 1844..1912  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22137   | Seq. ID | OJ990605_36.9919.C3 |
| Gene No.    | 46102   | Strand  | -                   |
| Start       | 903   | End     | 1954                |
| Name        | OJ990605_36.9919.C3.o1.tm   | Method  | TBLASTX:Maize       |
| Start       | 1513  | End     | 1954                |
| GI          | none  | Score   | 649                 |
| Exons       | 1513..1953, 1514..1954, 1537..1953  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22137   | Seq. ID | OJ990605_36.9919.C3 |
| Gene No.    | 46102   | Strand  | -                   |
| Start       | 903   | End     | 1954                |
| Name        | OJ990605_36.9919.C3.o1.tw   | Method  | TBLASTX:Wheat       |
| Start       | 1653  | End     | 1954                |
| GI          | none  | Score   | 404                 |
| Exons       | 1653..1952, 1654..1953, 1654..1953, 1844..1954  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22138   | Seq. ID | OJ990605_36.9919.C4 |
| Gene No.    | 46103   | Strand  | +                   |
| Start       | 329   | End     | 798                 |
| Name        | OJ990605_36.9919.C4.o1.gp   | Method  | AAT/GAP             |
| Start       | 329   | End     | 798                 |
| GI          | uC-osflcyp097b05b1  | Score   | 907                 |
| Exons       | 329..798  |         |                     |
| GI Descrip. | '140503/sp P12173 YCTI ORYSA 3.0e-39 HYPOTHETICAL 14 KD PROTEIN IN TRNI INTRON (ORF 133) >gi_82518_pir_JQ0279 hypothetical 14.5K protein (trnI intron) - rice chloroplast >gi_12041_emb_CAA33945_ (X15901) ORF133; ORF within trnI intron [Oryza sativa] >gi_12061_emb_CAA33915_ (X15901) ORF133; ORF within trnI intron [Oryza sativa] >gi_226660_prf_1603356CL trnI intron ORF 133 [Oryza'] |         |                     |
|             |   |         |                     |
| Seq. No.    | 22138   | Seq. ID | OJ990605_36.9919.C4 |
| Gene No.    | 46104   | Strand  | -                   |
| Start       | 1444  | End     | 2385                |
| Name        | OJ990605_36.9919.C4.o2.gp   | Method  | AAT/GAP             |
| Start       | 1444  | End     | 2385                |
| GI          | 688_1.R1084   | Score   | 1842                |
| Exons       | 1444..2385  |         |                     |
| GI Descrip. | '226661/prf  1603356CM 6.0e-54 trnA intron ORF 109 [Oryza sativa]'  |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22138   | Seq. ID | OJ990605_36.9919.C4 |
| Gene No. | 46105   | Strand  | -                   |
| Start    | 2417  | End     | 2586                |
| Name     | OJ990605_36.9919.C4.o4.ts   | Method  | TBLASTX:Soybean     |
| Start    | 10  | End     | 333                 |
| GI       | none  | Score   | 128                 |
| Exons    | 10..111, 18..113, 19..111, 101..166, 104..166, 117..170, 248..283, 249..284, 287..331, 289..333, 294..332 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22138  | Seq. ID | OJ990605_36.9919.C4 |
| Gene No. | 46105  | Strand  | -                   |
| Start    | 2417   | End     | 2586                |
| Name     | OJ990605_36.9919.C4.o4.tc  | Method  | TBLASTX:Cress       |
| Start    | 18   | End     | 366                 |
| GI       | none   | Score   | 129                 |
| Exons    | 18..113, 20..112, 101..187, 117..188, 217..270, 219..266, 240..281, 242..286, 272..301, 279..365, 281..364, 289..366 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22138   | Seq. ID | OJ990605_36.9919.C4 |
| Gene No. | 46105   | Strand  | -                   |
| Start    | 2417  | End     | 2586                |
| Name     | OJ990605_36.9919.C4.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 21  | End     | 532                 |
| GI       | none  | Score   | 301                 |
| Exons    | 21..212, 21..212, 23..217, 205..285, 219..281, 222..302, 231..530, 260..532, 260..532 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22138  | Seq. ID | OJ990605_36.9919.C4 |
| Gene No. | 46105  | Strand  | -                   |
| Start    | 2417   | End     | 2586                |
| Name     | OJ990605_36.9919.C4.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 744  | End     | 988                 |
| GI       | none   | Score   | 199                 |
| Exons    | 744..875, 744..881, 745..876, 865..921, 866..919, 928..987, 928..987, 929..988, 929..988 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22138  | Seq. ID | OJ990605_36.9919.C4 |
| Gene No. | 46105  | Strand  | -                   |
| Start    | 2417   | End     | 2586                |
| Name     | OJ990605_36.9919.C4.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 1007   | End     | 1564                |
| GI       | none   | Score   | 80                  |
| Exons    | 1007..1036, 1035..1124, 1037..1126, 1038..1127, 1071..1394, 1102..1434, 1123..1392, 1128..1394, 1383..1562, 1391..1564, 1417..1563 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22138  | Seq. ID | OJ990605_36.9919.C4 |
| Gene No. | 46105  | Strand  | -                   |
| Start    | 2417   | End     | 2586                |
| Name     | OJ990605_36.9919.C4.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 1327   | End     | 1963                |
| GI       | none   | Score   | 324                 |
| Exons    | 1327..1587, 1329..1571, 1563..1691, 1566..1700, 1570..1716, 1573..1695, 1616..1696, 1685..1891, 1686..1877, 1693..1881, 1833..1961, 1876..1962, 1877..1963, 1877..1963 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22138 | Seq. ID | OJ990605_36.9919.C4 |
|----------|-------|---------|---------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46105  | Strand | -             |
| Start    | 2417   | End    | 2586          |
| Name     | OJ990605_36.9919.C4.o2.tc  | Method | TBLASTX:Cress |
| Start    | 1577   | End    | 1951          |
| GI       | none   | Score  | 155           |
| Exons    | 1577..1690, 1579..1689, 1616..1690, 1686..1880, 1687..1881, 1688..1891, 1876..1950, 1877..1951 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22138  | Seq. ID | OJ990605_36.9919.C4 |
| Gene No. | 46105  | Strand  | -                   |
| Start    | 2417   | End     | 2586                |
| Name     | OJ990605_36.9919.C4.o3.tc  | Method  | TBLASTX:Cress       |
| Start    | 2062   | End     | 2423                |
| GI       | none   | Score   | 40                  |
| Exons    | 2062..2097, 2068..2097, 2069..2101, 2073..2186, 2085..2195, 2098..2196, 2098..2211, 2111..2212, 2159..2296, 2215..2295, 2247..2303, 2255..2296, 2298..2423, 2298..2423 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22138  | Seq. ID | OJ990605_36.9919.C4 |
| Gene No. | 46105  | Strand  | -                   |
| Start    | 2417   | End     | 2586                |
| Name     | OJ990605_36.9919.C4.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 2215   | End     | 2586                |
| GI       | none   | Score   | 133                 |
| Exons    | 2215..2331, 2216..2296, 2247..2303, 2310..2339, 2322..2375, 2335..2388, 2336..2389, 2378..2470, 2381..2458, 2386..2460, 2471..2524, 2472..2522, 2473..2535, 2473..2523, 2535..2585, 2560..2586 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22138   | Seq. ID | OJ990605_36.9919.C4 |
| Gene No.    | 46105   | Strand  | -                   |
| Start       | 2417  | End     | 2586                |
| Name        | OJ990605_36.9919.C4.o3.gp   | Method  | AAT/GAP             |
| Start       | 2417  | End     | 2586                |
| GI          | 2669_1.R1084  | Score   | 283                 |
| Exons       | 2417..2586  |         |                     |
| GI Descrip. | '3914470/sp Q40070 PSBR_HORVU 8.0e-26 PHOTOSYSTEM II 10 KD POLYPEPTIDE PRECURSOR >gi_1321868_emb_CAA66373_(X97771) 10kD PSII protein [Hordeum vulgare]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22138  | Seq. ID | OJ990605_36.9919.C4 |
| Gene No. | 46105  | Strand  | -                   |
| Start    | 2417   | End     | 2586                |
| Name     | OJ990605_36.9919.C4.o2.tm                      | Method  | TBLASTX:Maize       |
| Start    | 2423   | End     | 2586                |
| GI       | none   | Score   | 262                 |
| Exons    | 2423..2584, 2424..2585, 2435..2584, 2437..2586 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22138                              | Seq. ID | OJ990605_36.9919.C4 |
| Gene No. | 46105                              | Strand  | -                   |
| Start    | 2417                               | End     | 2586                |
| Name     | OJ990605_36.9919.C4.o5.tc          | Method  | TBLASTX:Cress       |
| Start    | 2435                               | End     | 2586                |
| GI       | none                               | Score   | 210                 |
| Exons    | 2435..2584, 2435..2584, 2437..2586 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22139 | Seq. ID | OJ990605_36.9919.C5 |
|----------|-------|---------|---------------------|

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 46106  | Strand | +       |
| Start       | 1  | End    | 128     |
| Name        | OJ990605_36.9919.C5.o1.gp  | Method | AAT/GAP |
| Start       | 1  | End    | 128     |
| GI          | LIB3431-040-P1-K2-C1   | Score  | 175     |
| Exons       | 1..128   |        |         |
| GI Descrip. | '114521/sp P12084 ATPA_ORYSA 6.0e-53 ATP SYNTHASE ALPHA CHAIN<br>>gi_67827_pir_PWRZA H <sup>+</sup> -transporting ATP synthase (EC 3.6.1.34)<br>alpha chain - rice chloroplast >gi_11979_emb_CAA33993_ (X15901)<br>ATPase alpha subunit [Oryza sativa] >gi_226696_prf_1603356X<br>ATPase alpha [Oryza sativa]' |        |         |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22140  | Seq. ID | OJ990605_36.9919.C6 |
| Gene No.    | 46107  | Strand  | -                   |
| Start       | 433  | End     | 586                 |
| Name        | OJ990605_36.9919.C6.o1.gp  | Method  | AAT/GAP             |
| Start       | 433  | End     | 586                 |
| GI          | 306_9.R1084  | Score   | 282                 |
| Exons       | 433..586   |         |                     |
| GI Descrip. | '287391/dbj D13111 RICMT15 1.0e-178 Oryza sativa mitochondrial<br>rpoB pseudogene' |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22140   | Seq. ID | OJ990605_36.9919.C6 |
| Gene No. | 46107   | Strand  | -                   |
| Start    | 433   | End     | 586                 |
| Name     | OJ990605_36.9919.C6.o1.tc   | Method  | TBLASTX:Cress       |
| Start    | 435   | End     | 586                 |
| GI       | none  | Score   | 125                 |
| Exons    | 435..530, 435..515, 449..547, 519..584, 519..584, 520..585,<br>527..586 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22141                     | Seq. ID | OJ990705_39.9919.C2 |
| Gene No. | 46108                     | Strand  | +                   |
| Start    | 6563                      | End     | 6724                |
| Name     | OJ990705_39.9919.C2.o4.gp | Method  | AAT/GAP             |
| Start    | 6563                      | End     | 6724                |
| GI       | none                      | Score   | 296                 |
| Exons    | 6563..6724                |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22141   | Seq. ID | OJ990705_39.9919.C2 |
| Gene No.    | 46109   | Strand  | +                   |
| Start       | 10619   | End     | 14159               |
| Name        | OJ990705_39.9919.C2.o6.gp   | Method  | AAT/GAP             |
| Start       | 10619   | End     | 12403               |
| GI          | 6761_1.R1084  | Score   | 1345                |
| Exons       | 10619..10924, 11027..11086, 11328..11455, 11577..11662,<br>11765..11796, 11954..12115, 12359..12403   |         |                     |
| GI Descrip. | '3184559 4.0e-28 (AF052290) putative c-type cytochrome<br>biogenesis protein [Synechococcus PCC7002]' |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22141   | Seq. ID | OJ990705_39.9919.C2 |
| Gene No. | 46109   | Strand  | +                   |
| Start    | 10619   | End     | 14159               |
| Name     | OJ990705_39.9919.C2.o2.gs                               | Method  | GENSCAN             |
| Start    | 10988   | End     | 14159               |
| GI       | none  | Score   | .78                 |
| Exons    | 10988..11002, 11027..11086, 11954..12115, 12359..12431, |         |                     |

12532..12632, 12907..12999, 13191..13220, 14112..14159

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
Gene No. 46109 Strand +  
Start 10619 End 14159  
Name OJ990705\_39.9919.C2.o3.np Method AAT/NAP  
Start 11364 End 13777  
GI 1653775 Score 351  
Exons 11364..11455, 11577..11691, 11954..12115, 12473..12632,  
12907..12999, 13174..13220, 13708..13777  
GI Descrip. (D90916) thiol:disulfide interchange protein DsbD [Synechocystis  
sp.]

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
Gene No. 46109 Strand +  
Start 10619 End 14159  
Name OJ990705\_39.9919.C2.o7.gp Method AAT/GAP  
Start 13192 End 14100  
GI none Score 804  
Exons 13192..13220, 13708..14100

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
Gene No. 46110 Strand -  
Start 288 End 10904  
Name OJ990705\_39.9919.C2.o1.gs Method GENSCAN  
Start 288 End 10904  
GI none Score .75  
Exons 288..522, 1235..1512, 2089..2160, 2892..3053, 3251..3355,  
3484..3570, 3754..3928, 5969..6722, 8932..9076, 10200..10403,  
10773..10904

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
Gene No. 46110 Strand -  
Start 288 End 10904  
Name OJ990705\_39.9919.C2.o1.np Method AAT/NAP  
Start 291 End 4071  
GI 984756 Score 1366  
Exons 291..522, 1235..1289, 1394..1512, 2089..2155, 2285..2325,  
2894..3053, 3251..3355, 3484..3570, 3683..3805, 3914..4071  
GI Descrip. (Z54153) chilling-inducible protein [Oryza sativa]

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
Gene No. 46110 Strand -  
Start 288 End 10904  
Name OJ990705\_39.9919.C2.o1.gp Method AAT/GAP  
Start 412 End 2171  
GI LIB3434-024-P1-K1-G9 Score 869  
Exons 412..522, 1235..1512, 2089..2171  
GI Descrip. '5107033/gb|AAD39930.1|AF133708\_1 2.0e-52 (AF133708) PP2A  
regulatory subunit [Arabidopsis thaliana]'

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
Gene No. 46110 Strand -  
Start 288 End 10904  
Name OJ990705\_39.9919.C2.o3.gp Method AAT/GAP  
Start 2528 End 4213  
GI 240\_1.R1084 Score 1059

Exons 2528..2547, 2877..3053, 3251..3355, 3484..3570, 3683..3805, 3914..4213  
 GI Descrip. '984756/emb|CAA90866| 1.0e-171 (Z54153) chilling-inducible protein [Oryza sativa]'

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
 Gene No. 46110 Strand -  
 Start 288 End 10904  
 Name OJ990705\_39.9919.C2.o2.gp Method AAT/GAP  
 Start 2877 End 4101  
 GI 240 1.R1084 Score 996  
 Exons 2877..3053, 3251..3355, 3484..3570, 3683..3805, 3914..4101  
 GI Descrip. '984756/emb|CAA90866| 1.0e-171 (Z54153) chilling-inducible protein [Oryza sativa]'

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
 Gene No. 46110 Strand -  
 Start 288 End 10904  
 Name OJ990705\_39.9919.C2.o2.np Method AAT/NAP  
 Start 6404 End 7759  
 GI 4678923 Score 167  
 Exons 6404..6870, 7689..7759  
 GI Descrip. (AL049711) putative protein [Arabidopsis thaliana]

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
 Gene No. 46110 Strand -  
 Start 288 End 10904  
 Name OJ990705\_39.9919.C2.o5.gp Method AAT/GAP  
 Start 10200 End 10475  
 GI none Score 413  
 Exons 10200..10475

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
 Gene No. 46111 Strand -  
 Start 14286 End 14830  
 Name OJ990705\_39.9919.C2.o2.tm Method TBLASTX:Maize  
 Start 273 End 4142  
 GI none Score 160  
 Exons 273..425, 282..524, 289..525, 1196..1513, 1234..1515, 1234..1512, 1235..1513, 2087..2161, 2087..2188, 2285..2326, 2289..2327, 2889..2945, 2935..3054, 2957..3055, 3237..3356, 3237..3356, 3244..3360, 3245..3358, 3482..3577, 3482..3574, 3484..3600, 3680..3808, 3681..3806, 3683..3808, 3922..4011, 3958..3990, 4018..4071, 4074..4142

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
 Gene No. 46111 Strand -  
 Start 14286 End 14830  
 Name OJ990705\_39.9919.C2.o1.ts Method TBLASTX:Soybean  
 Start 285 End 3842  
 GI none Score 92  
 Exons 285..392, 288..344, 408..524, 415..525, 1196..1507, 1234..1500, 2096..2170, 3484..3600, 3680..3808, 3681..3842

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
 Gene No. 46111 Strand -  
 Start 14286 End 14830



|          |  |         |                     |
|----------|--|---------|---------------------|
| Name     | OJ990705_39.9919.C2.o2.tc  | Method  | TBLASTX:Cress       |
| Start    | 288  | End     | 525                 |
| GI       | none   | Score   | 73                  |
| Exons    | 288..344, 289..366, 291..365, 408..524, 451..525   |         |                     |
|          |  |         |                     |
| Seq. No. | 22141  | Seq. ID | OJ990705_39.9919.C2 |
| Gene No. | 46111  | Strand  | -                   |
| Start    | 14286  | End     | 14830               |
| Name     | OJ990705_39.9919.C2.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 6448   | End     | 6705                |
| GI       | none   | Score   | 107                 |
| Exons    | 6448..6705, 6448..6705   |         |                     |
|          |  |         |                     |
| Seq. No. | 22141  | Seq. ID | OJ990705_39.9919.C2 |
| Gene No. | 46111  | Strand  | -                   |
| Start    | 14286  | End     | 14830               |
| Name     | OJ990705_39.9919.C2.o5.tm  | Method  | TBLASTX:Maize       |
| Start    | 6568   | End     | 6724                |
| GI       | none   | Score   | 153                 |
| Exons    | 6568..6705, 6572..6706, 6573..6707, 6626..6724   |         |                     |
|          |  |         |                     |
| Seq. No. | 22141  | Seq. ID | OJ990705_39.9919.C2 |
| Gene No. | 46111  | Strand  | -                   |
| Start    | 14286  | End     | 14830               |
| Name     | OJ990705_39.9919.C2.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 11337  | End     | 12118               |
| GI       | none   | Score   | 125                 |
| Exons    | 11337..11453, 11345..11461, 11364..11453, 11372..11455, 11569..11646, 11574..11663, 11587..11670, 11764..11799, 11953..12114, 11954..12118   |         |                     |
|          |  |         |                     |
| Seq. No. | 22141  | Seq. ID | OJ990705_39.9919.C2 |
| Gene No. | 46111  | Strand  | -                   |
| Start    | 14286  | End     | 14830               |
| Name     | OJ990705_39.9919.C2.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 11565  | End     | 12425               |
| GI       | none   | Score   | 99                  |
| Exons    | 11565..11663, 11593..11670, 11597..11701, 11598..11663, 11763..11798, 11764..11799, 11952..12116, 11953..12117, 11953..12117, 11954..12118, 12333..12425, 12357..12425                             |         |                     |
|          |  |         |                     |
| Seq. No. | 22141  | Seq. ID | OJ990705_39.9919.C2 |
| Gene No. | 46111  | Strand  | -                   |
| Start    | 14286  | End     | 14830               |
| Name     | OJ990705_39.9919.C2.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 12521  | End     | 13785               |
| GI       | none   | Score   | 178                 |
| Exons    | 12521..12646, 12524..12631, 12904..12999, 12906..12998, 12913..12999, 13126..13218, 13173..13220, 13174..13218, 13705..13740, 13707..13742, 13708..13743, 13722..13784, 13739..13783, 13741..13785 |         |                     |
|          |  |         |                     |
| Seq. No. | 22141  | Seq. ID | OJ990705_39.9919.C2 |
| Gene No. | 46111  | Strand  | -                   |
| Start    | 14286  | End     | 14830               |
| Name     | OJ990705_39.9919.C2.o8.gp  | Method  | AAT/GAP             |
| Start    | 14286  | End     | 14822               |

GI 5607609  
Exons 14286..14641, 14739..14822

Score 800

Seq. No. 22141 Seq. ID OJ990705\_39.9919.C2  
Gene No. 46111 Strand -  
Start 14286 End 14830  
Name OJ990705\_39.9919.C2.o1.tm Method TBLASTX:Maize  
Start 14400 End 14830  
GI none Score 76  
Exons 14400..14450, 14401..14493, 14402..14488, 14432..14491,  
14446..14493, 14481..14672, 14484..14654, 14737..14820,  
14738..14821, 14738..14830

Seq. No. 22142 Seq. ID OJ990705\_39.9919.C3  
Gene No. 46112 Strand +  
Start 5960 End 12313  
Name OJ990705\_39.9919.C3.o1.np Method AAT/NAP  
Start 5960 End 11986  
GI 6056209 Score 705  
Exons 5960..6085, 9318..9837, 10850..10896, 10998..11173, 11881..11986  
GI Descrip. (AC009400) unknown protein [Arabidopsis thaliana]

Seq. No. 22142 Seq. ID OJ990705\_39.9919.C3  
Gene No. 46112 Strand +  
Start 5960 End 12313  
Name OJ990705\_39.9919.C3.o2.gs Method GENSCAN  
Start 8901 End 11985  
GI none Score .96  
Exons 8901..9837, 10850..10896, 10998..11173, 11771..11789,  
11881..11985

Seq. No. 22142 Seq. ID OJ990705\_39.9919.C3  
Gene No. 46112 Strand +  
Start 5960 End 12313  
Name OJ990705\_39.9919.C3.o6.gp Method AAT/GAP  
Start 9808 End 12313  
GI 16175\_1.R1084 Score 1286  
Exons 9808..9837, 10850..10896, 10998..11173, 11881..12313  
GI Descrip. '6056209/gb|AAF02826.1|AC009400\_22 1.0e-36 (AC009400) unknown  
protein [Arabidopsis thaliana]'

Seq. No. 22142 Seq. ID OJ990705\_39.9919.C3  
Gene No. 46113 Strand +  
Start 15386 End 16483  
Name OJ990705\_39.9919.C3.o3.gs Method GENSCAN  
Start 15386 End 16483  
GI none Score 1  
Exons 15386..16483

Seq. No. 22142 Seq. ID OJ990705\_39.9919.C3  
Gene No. 46115 Strand -  
Start 2484 End 2872  
Name OJ990705\_39.9919.C3.o2.gp Method AAT/GAP  
Start 2484 End 2872  
GI none Score 674  
Exons 2484..2872

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22142                              | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46116                              | Strand  | -                   |
| Start    | 2990                               | End     | 3851                |
| Name     | OJ990705_39.9919.C3.o3.gp          | Method  | AAT/GAP             |
| Start    | 2990                               | End     | 3851                |
| GI       | 5607608                            | Score   | 763                 |
| Exons    | 2990..3042, 3187..3284, 3584..3851 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22142   | Seq. ID | OJ990705_39.9919.C3 |
| Gene No.    | 46117   | Strand  | -                   |
| Start       | 9165  | End     | 9774                |
| Name        | OJ990705_39.9919.C3.o5.gp   | Method  | AAT/GAP             |
| Start       | 9165  | End     | 9774                |
| GI          | 14262_1.R1084   | Score   | 849                 |
| Exons       | 9165..9228, 9272..9774  |         |                     |
| GI Descrip. | '6056209/gb AAF02826.1 AC009400_22 7.0e-17 (AC009400) unknown protein [Arabidopsis thaliana]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22142  | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118  | Strand  | -                   |
| Start    | 17014  | End     | 21115               |
| Name     | OJ990705_39.9919.C3.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 2011   | End     | 3290                |
| GI       | none   | Score   | 84                  |
| Exons    | 2011..2091, 2012..2074, 2152..2214, 2153..2215, 2156..2233, 2157..2234, 2366..2386, 2390..2452, 2719..2862, 2743..2895, 2744..2869, 2808..2870, 2960..3052, 2960..3025, 2970..3041, 3185..3286, 3186..3290 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22142                     | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118                     | Strand  | -                   |
| Start    | 17014                     | End     | 21115               |
| Name     | OJ990705_39.9919.C3.o2.tc | Method  | TBLASTX:Cress       |
| Start    | 9633                      | End     | 9794                |
| GI       | none                      | Score   | 231                 |
| Exons    | 9633..9794, 9635..9706    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22142  | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118  | Strand  | -                   |
| Start    | 17014  | End     | 21115               |
| Name     | OJ990705_39.9919.C3.o6.tm                          | Method  | TBLASTX:Maize       |
| Start    | 9704   | End     | 10925               |
| GI       | none   | Score   | 224                 |
| Exons    | 9704..9838, 9705..9839, 10848..10925, 10849..10896 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22142  | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118  | Strand  | -                   |
| Start    | 17014  | End     | 21115               |
| Name     | OJ990705_39.9919.C3.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 9750   | End     | 11985               |
| GI       | none   | Score   | 124                 |
| Exons    | 9750..9839, 9752..9838, 10848..10901, 10849..10896, 10855..10914, 10995..11174, 10997..11176, 10998..11198, 11772..11789, 11871..11981, 11875..11985 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22142 | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118 | Strand  | -                   |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Start       | 17014  | End     | 21115               |
| Name        | OJ990705_39.9919.C3.o3.tm  | Method  | TBLASTX:Maize       |
| Start       | 10974  | End     | 12083               |
| GI          | none   | Score   | 277                 |
| Exons       | 10974..11174, 11000..11176, 11009..11176, 11772..11789, 11871..11984, 11875..11985, 12051..12083   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22142  | Seq. ID | OJ990705_39.9919.C3 |
| Gene No.    | 46118  | Strand  | -                   |
| Start       | 17014  | End     | 21115               |
| Name        | OJ990705_39.9919.C3.o7.gp  | Method  | AAT/GAP             |
| Start       | 16761  | End     | 18046               |
| GI          | 10910_1.R1084  | Score   | 1666                |
| Exons       | 16761..17319, 17594..17892, 17994..18046   |         |                     |
| GI Descrip. | '1805654/emb CAA68234  2.0e-63 (X99972) calmodulin-stimulated calcium-ATPase [Brassica oleracea]'  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22142  | Seq. ID | OJ990705_39.9919.C3 |
| Gene No.    | 46118  | Strand  | -                   |
| Start       | 17014  | End     | 21115               |
| Name        | OJ990705_39.9919.C3.o7.tm  | Method  | TBLASTX:Maize       |
| Start       | 17003  | End     | 17274               |
| GI          | none   | Score   | 63                  |
| Exons       | 17003..17065, 17008..17079, 17082..17192, 17083..17274, 17083..17274   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22142  | Seq. ID | OJ990705_39.9919.C3 |
| Gene No.    | 46118  | Strand  | -                   |
| Start       | 17014  | End     | 21115               |
| Name        | OJ990705_39.9919.C3.o2.np  | Method  | AAT/NAP             |
| Start       | 17008  | End     | 20867               |
| GI          | 2618691  | Score   | 3171                |
| Exons       | 17008..17319, 17594..17892, 17994..18165, 18336..18494, 18569..20511, 20601..20658, 20703..20867   |         |                     |
| GI Descrip. | (AC002510) putative Ca2+-ATPase [Arabidopsis thaliana]   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22142  | Seq. ID | OJ990705_39.9919.C3 |
| Gene No.    | 46118  | Strand  | -                   |
| Start       | 17014  | End     | 21115               |
| Name        | OJ990705_39.9919.C3.o4.gs  | Method  | GENSCAN             |
| Start       | 17014  | End     | 21115               |
| GI          | none   | Score   | .62                 |
| Exons       | 17014..17319, 17594..17892, 17994..18165, 18336..18494, 18569..20511, 21097..21115   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22142  | Seq. ID | OJ990705_39.9919.C3 |
| Gene No.    | 46118  | Strand  | -                   |
| Start       | 17014  | End     | 21115               |
| Name        | OJ990705_39.9919.C3.o1.tc  | Method  | TBLASTX:Cress       |
| Start       | 17077  | End     | 20661               |
| GI          | none   | Score   | 85                  |
| Exons       | 17077..17328, 17077..17322, 17591..17938, 17720..17884, 17724..17924, 17992..18168, 17993..18124, 18310..18498, 18332..18499, 18333..18500, 18333..18500, 18566..19246, 18618..19259, 19311..19553, 19313..20326, 19343..19555, 19610..20023, 19635..20303, 19867..20346, 20316..20498, 20327..20497, 20596..20661, 20615..20656 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22142   | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118   | Strand  | -                   |
| Start    | 17014   | End     | 21115               |
| Name     | OJ990705_39.9919.C3.o1.ts   | Method  | TBLASTX:Soybean     |
| Start    | 17084   | End     | 19186               |
| GI       | none  | Score   | 67                  |
| Exons    | 17084..17278, 17149..17322, 17577..17903, 17591..17938,<br>17992..18168, 17993..18124, 18049..18168, 18331..18495,<br>18333..18500, 18336..18518, 18566..18799, 18566..19186,<br>18618..19184, 18944..19186 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22142  | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118  | Strand  | -                   |
| Start    | 17014  | End     | 21115               |
| Name     | OJ990705_39.9919.C3.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 17275  | End     | 19237               |
| GI       | none   | Score   | 242                 |
| Exons    | 17275..17322, 17591..17938, 17594..17896, 17992..18168,<br>17993..18124, 18027..18167, 18046..18168, 18331..18498,<br>18332..18496, 18333..18500, 18566..19237, 18621..19220 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22142  | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118  | Strand  | -                   |
| Start    | 17014  | End     | 21115               |
| Name     | OJ990705_39.9919.C3.o1.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 19127  | End     | 19469               |
| GI       | none   | Score   | 204                 |
| Exons    | 19127..19246, 19149..19469, 19306..19467, 19307..19468 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22142                                    | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118                                    | Strand  | -                   |
| Start    | 17014                                    | End     | 21115               |
| Name     | OJ990705_39.9919.C3.o2.ts                | Method  | TBLASTX:Soybean     |
| Start    | 19190                                    | End     | 19907               |
| GI       | none                                     | Score   | 578                 |
| Exons    | 19190..19903, 19194..19907, 19659..19904 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22142                                    | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118                                    | Strand  | -                   |
| Start    | 17014                                    | End     | 21115               |
| Name     | OJ990705_39.9919.C3.o2.tm                | Method  | TBLASTX:Maize       |
| Start    | 19334                                    | End     | 20045               |
| GI       | none                                     | Score   | 654                 |
| Exons    | 19334..19594, 19344..20045, 19637..20044 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22142                      | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118                      | Strand  | -                   |
| Start    | 17014                      | End     | 21115               |
| Name     | OJ990705_39.9919.C3.o4.ts  | Method  | TBLASTX:Soybean     |
| Start    | 19997                      | End     | 20332               |
| GI       | none                       | Score   | 145                 |
| Exons    | 19997..20332, 20097..20330 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22142 | Seq. ID | OJ990705_39.9919.C3 |
| Gene No. | 46118 | Strand  | -                   |
| Start    | 17014 | End     | 21115               |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Name        | OJ990705_39.9919.C3.o5.tm  | Method  | TBLASTX:Maize       |
| Start       | 20192  | End     | 20660               |
| GI          | none   | Score   | 227                 |
| Exons       | 20192..20437, 20196..20447, 20402..20500, 20427..20480, 20596..20652, 20597..20632, 20622..20660 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22143  | Seq. ID | OJ990705_39.9919.C4 |
| Gene No.    | 46119  | Strand  | +                   |
| Start       | 2681   | End     | 7258                |
| Name        | OJ990705_39.9919.C4.o1.np  | Method  | AAT/NAP             |
| Start       | 2140   | End     | 2329                |
| GI          | 4755191  | Score   | 66                  |
| Exons       | 2140..2329   |         |                     |
| GI Descrip. | (AC007018) putative non-LTR retroelement reverse transcriptase [Arabidopsis thaliana]            |         |                     |
|             |  |         |                     |
| Seq. No.    | 22143  | Seq. ID | OJ990705_39.9919.C4 |
| Gene No.    | 46119  | Strand  | +                   |
| Start       | 2681   | End     | 7258                |
| Name        | OJ990705_39.9919.C4.o2.gs  | Method  | GENSCAN             |
| Start       | 2681   | End     | 7258                |
| GI          | none   | Score   | .47                 |
| Exons       | 2681..2794, 3140..3330, 3423..3514, 3559..3814, 5595..6124, 6442..6527, 6712..6870, 6935..7258   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22143  | Seq. ID | OJ990705_39.9919.C4 |
| Gene No.    | 46120  | Strand  | +                   |
| Start       | 9750   | End     | 11004               |
| Name        | OJ990705_39.9919.C4.o2.gp  | Method  | AAT/GAP             |
| Start       | 9750   | End     | 11004               |
| GI          | none   | Score   | 2421                |
| Exons       | 9750..11004  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22143  | Seq. ID | OJ990705_39.9919.C4 |
| Gene No.    | 46121  | Strand  | +                   |
| Start       | 11265  | End     | 11854               |
| Name        | OJ990705_39.9919.C4.o3.gp  | Method  | AAT/GAP             |
| Start       | 11265  | End     | 11854               |
| GI          | none   | Score   | 1132                |
| Exons       | 11265..11854   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22143  | Seq. ID | OJ990705_39.9919.C4 |
| Gene No.    | 46122  | Strand  | -                   |
| Start       | 524  | End     | 847                 |
| Name        | OJ990705_39.9919.C4.o1.gs  | Method  | GENSCAN             |
| Start       | 524  | End     | 847                 |
| GI          | none   | Score   | .85                 |
| Exons       | 524..598, 662..847   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22143  | Seq. ID | OJ990705_39.9919.C4 |
| Gene No.    | 46123  | Strand  | -                   |
| Start       | 4592   | End     | 12176               |
| Name        | OJ990705_39.9919.C4.o2.np  | Method  | AAT/NAP             |
| Start       | 4592   | End     | 12176               |
| GI          | 4680183  | Score   | 175                 |
| Exons       | 4592..4681, 5292..5362, 11765..11905, 12154..12176   |         |                     |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica]  |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22143  | Seq. ID | OJ990705_39.9919.C4 |
| Gene No.    | 46123  | Strand  | -                   |
| Start       | 4592   | End     | 12176               |
| Name        | OJ990705_39.9919.C4.o1.tm  | Method  | TBLASTX:Maize       |
| Start       | 6790   | End     | 7147                |
| GI          | none   | Score   | 46                  |
| Exons       | 6790..6825, 6929..7144, 6932..7147   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22143  | Seq. ID | OJ990705_39.9919.C4 |
| Gene No.    | 46123  | Strand  | -                   |
| Start       | 4592   | End     | 12176               |
| Name        | OJ990705_39.9919.C4.o3.gs  | Method  | GENSCAN             |
| Start       | 8147   | End     | 9882                |
| GI          | none   | Score   | .56                 |
| Exons       | 8147..8311, 9367..9606, 9790..9882   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22143  | Seq. ID | OJ990705_39.9919.C4 |
| Gene No.    | 46123  | Strand  | -                   |
| Start       | 4592   | End     | 12176               |
| Name        | OJ990705_39.9919.C4.o1.gp  | Method  | AAT/GAP             |
| Start       | 9042   | End     | 9343                |
| GI          | uC-osflcyp154c08a1   | Score   | 395                 |
| Exons       | 9042..9343   |         |                     |
| GI Descrip. | '5701799/emb CAB52175.1  3.0e-29 (AJ245408) putative syntaxin protein [Arabidopsis thaliana]'                        |         |                     |
|             |  |         |                     |
| Seq. No.    | 22144  | Seq. ID | OJ990705_39.9919.C5 |
| Gene No.    | 46124  | Strand  | +                   |
| Start       | 91   | End     | 244                 |
| Name        | OJ990705_39.9919.C5.o1.gs  | Method  | GENSCAN             |
| Start       | 91   | End     | 244                 |
| GI          | none   | Score   | .45                 |
| Exons       | 91..244  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22145  | Seq. ID | OJ990705_39.9919.C6 |
| Gene No.    | 46125  | Strand  | +                   |
| Start       | 415  | End     | 1093                |
| Name        | OJ990705_39.9919.C6.o1.gs  | Method  | GENSCAN             |
| Start       | 415  | End     | 1052                |
| GI          | none   | Score   | .87                 |
| Exons       | 415..533, 701..1052  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22145  | Seq. ID | OJ990705_39.9919.C6 |
| Gene No.    | 46125  | Strand  | +                   |
| Start       | 415  | End     | 1093                |
| Name        | OJ990705_39.9919.C6.o1.np  | Method  | AAT/NAP             |
| Start       | 470  | End     | 1093                |
| GI          | 2498930  | Score   | 697                 |
| Exons       | 470..533, 701..1093  |         |                     |
| GI Descrip. | DORSAL-VENTRAL PATTERNING PROTEIN SOG (SHORT GASTRULATION PROTEIN) gi 1203794 (U18774) Sog [Drosophila melanogaster] |         |                     |
|             |  |         |                     |
| Seq. No.    | 22146  | Seq. ID | OJ990705_39.9919.C8 |
| Gene No.    | 46126  | Strand  | +                   |
| Start       | 1788   | End     | 6119                |
| Name        | OJ990705_39.9919.C8.o2.np  | Method  | AAT/NAP             |

|             |  |       |      |
|-------------|--|-------|------|
| Start       | 1788   | End   | 6119 |
| GI          | 3850583  | Score | 324  |
| Exons       | 1788..1968, 3123..3266, 4496..4595, 5253..5387, 6046..6119   |       |      |
| GI Descrip. | (AC005278) Contains similarity to transcription initiation factor IIE, alpha subunit gb X63468 from Homo sapiens. [Arabidopsis thaliana] |       |      |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22146   | Seq. ID | OJ990705_39.9919.C8 |
| Gene No.    | 46127   | Strand  | -                   |
| Start       | 1   | End     | 1367                |
| Name        | OJ990705_39.9919.C8.o1.np                         | Method  | AAT/NAP             |
| Start       | 1   | End     | 1367                |
| GI          | 6598445   | Score   | 243                 |
| Exons       | 1..206, 611..778, 1158..1367                      |         |                     |
| GI Descrip. | (AC005168) unknown protein [Arabidopsis thaliana] |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22146                              | Seq. ID | OJ990705_39.9919.C8 |
| Gene No. | 46128                              | Strand  | -                   |
| Start    | 5224                               | End     | 6119                |
| Name     | OJ990705_39.9919.C8.o2.gs          | Method  | GENSCAN             |
| Start    | 5224                               | End     | 5971                |
| GI       | none                               | Score   | .79                 |
| Exons    | 5224..5259, 5490..5660, 5915..5971 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22146  | Seq. ID | OJ990705_39.9919.C8 |
| Gene No.    | 46128  | Strand  | -                   |
| Start       | 5224   | End     | 6119                |
| Name        | OJ990705_39.9919.C8.o3.np                      | Method  | AAT/NAP             |
| Start       | 5607   | End     | 6119                |
| GI          | 5042454  | Score   | 217                 |
| Exons       | 5607..5660, 5915..6119                         |         |                     |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No.    | 46129  | Strand  | +                   |
| Start       | 932  | End     | 4220                |
| Name        | OJ990705_39.9919.C9.o1.np                      | Method  | AAT/NAP             |
| Start       | 932  | End     | 4220                |
| GI          | 6907089  | Score   | 5141                |
| Exons       | 932..2193, 2288..4220                          |         |                     |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No.    | 46130  | Strand  | +                   |
| Start       | 12198  | End     | 14710               |
| Name        | OJ990705_39.9919.C9.o4.np  | Method  | AAT/NAP             |
| Start       | 12198  | End     | 14707               |
| GI          | 3850583  | Score   | 296                 |
| Exons       | 12198..12387, 13039..13221, 13499..13771, 13826..14039, 14610..14707   |         |                     |
| GI Descrip. | (AC005278) Contains similarity to transcription initiation factor IIE, alpha subunit gb X63468 from Homo sapiens. [Arabidopsis thaliana] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22147 | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46130 | Strand  | +                   |
| Start    | 12198 | End     | 14710               |



|       |  |        |         |
|-------|--|--------|---------|
| Name  | OJ990705_39.9919.C9.o3.gs                              | Method | GENSCAN |
| Start | 13129  | End    | 14710   |
| GI    | none   | Score  | .94     |
| Exons | 13129..13221, 13499..13717, 13826..14039, 14610..14710 |        |         |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22147                      | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46131                      | Strand  | +                   |
| Start    | 16292                      | End     | 16574               |
| Name     | OJ990705_39.9919.C9.o4.gs  | Method  | GENSCAN             |
| Start    | 16292                      | End     | 16574               |
| GI       | none                       | Score   | .66                 |
| Exons    | 16292..16402, 16407..16574 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22147                      | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46132                      | Strand  | +                   |
| Start    | 18855                      | End     | 19473               |
| Name     | OJ990705_39.9919.C9.o6.gs  | Method  | GENSCAN             |
| Start    | 18855                      | End     | 19473               |
| GI       | none                       | Score   | .9                  |
| Exons    | 18855..19154, 19204..19473 |         |                     |

|             |                                   |         |                     |
|-------------|-----------------------------------|---------|---------------------|
| Seq. No.    | 22147                             | Seq. ID | OJ990705_39.9919.C9 |
| Gene No.    | 46133                             | Strand  | +                   |
| Start       | 19920                             | End     | 21470               |
| Name        | OJ990705_39.9919.C9.o5.np         | Method  | AAT/NAP             |
| Start       | 19886                             | End     | 21461               |
| GI          | 4204095                           | Score   | 867                 |
| Exons       | 19886..21461                      |         |                     |
| GI Descrip. | (AF030260) CYP94A1 [Vicia sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22147                     | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46133                     | Strand  | +                   |
| Start    | 19920                     | End     | 21470               |
| Name     | OJ990705_39.9919.C9.o7.gs | Method  | GENSCAN             |
| Start    | 19920                     | End     | 21470               |
| GI       | none                      | Score   | .66                 |
| Exons    | 19920..21470              |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No.    | 46134  | Strand  | +                   |
| Start       | 31289  | End     | 40116               |
| Name        | OJ990705_39.9919.C9.o9.np  | Method  | AAT/NAP             |
| Start       | 31289  | End     | 40116               |
| GI          | 5420387  | Score   | 269                 |
| Exons       | 31289..31351, 35933..36083, 36141..36317, 38201..38601, 39989..40116 |         |                     |
| GI Descrip. | (AJ243459) proteophosphoglycan [Leishmania major]                    |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No.    | 46134  | Strand  | +                   |
| Start       | 31289  | End     | 40116               |
| Name        | OJ990705_39.9919.C9.o8.np  | Method  | AAT/NAP             |
| Start       | 36003  | End     | 39104               |
| GI          | 2191178  | Score   | 593                 |
| Exons       | 36003..37106, 38969..39104   |         |                     |
| GI Descrip. | (AF007270) contains similarity to MIPP proteins [Arabidopsis thaliana] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No.    | 46135  | Strand  | -                   |
| Start       | 4854   | End     | 10498               |
| Name        | OJ990705_39.9919.C9.o2.np  | Method  | AAT/NAP             |
| Start       | 4854   | End     | 10498               |
| GI          | 6498441  | Score   | 6944                |
| Exons       | 4854..5135, 5229..6626, 6798..7094, 7287..7713, 7888..8022, 8206..8579, 8643..9106, 9437..10498  |         |                     |
| GI Descrip. | (AP000815). EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No.    | 46136  | Strand  | -                   |
| Start       | 11227  | End     | 18350               |
| Name        | OJ990705_39.9919.C9.o3.np  | Method  | AAT/NAP             |
| Start       | 11227  | End     | 18180               |
| GI          | 5042454  | Score   | 249                 |
| Exons       | 11227..11280, 11536..11711, 11937..11999, 17439..17715, 18111..18180 |         |                     |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa]                       |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22147                     | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46136                     | Strand  | -                   |
| Start    | 11227                     | End     | 18350               |
| Name     | OJ990705_39.9919.C9.o5.gs | Method  | GENSCAN             |
| Start    | 17010                     | End     | 18350               |
| GI       | none                      | Score   | 1                   |
| Exons    | 17010..18350              |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22147                     | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46137                     | Strand  | -                   |
| Start    | 22409                     | End     | 22566               |
| Name     | OJ990705_39.9919.C9.o1.gp | Method  | AAT/GAP             |
| Start    | 22409                     | End     | 22566               |
| GI       | 3090639                   | Score   | 231                 |
| Exons    | 22409..22566              |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No.    | 46138  | Strand  | -                   |
| Start       | 23450  | End     | 25902               |
| Name        | OJ990705_39.9919.C9.o6.np  | Method  | AAT/NAP             |
| Start       | 23450  | End     | 25902               |
| GI          | 5903044  | Score   | 1507                |
| Exons       | 23450..25902   |         |                     |
| GI Descrip. | (AC008016) Contains 3 PF 01535 DUF domains. [Arabidopsis thaliana] |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22147                      | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46139                      | Strand  | -                   |
| Start    | 26333                      | End     | 26868               |
| Name     | OJ990705_39.9919.C9.o2.gp  | Method  | AAT/GAP             |
| Start    | 26333                      | End     | 26868               |
| GI       | none                       | Score   | 748                 |
| Exons    | 26333..26665, 26798..26868 |         |                     |

|             |                                   |         |                     |
|-------------|-----------------------------------|---------|---------------------|
| Seq. No.    | 22147                             | Seq. ID | OJ990705_39.9919.C9 |
| Gene No.    | 46140                             | Strand  | -                   |
| Start       | 28448                             | End     | 30013               |
| Name        | OJ990705_39.9919.C9.o7.np         | Method  | AAT/NAP             |
| Start       | 28448                             | End     | 30013               |
| GI          | 4204095                           | Score   | 911                 |
| Exons       | 28448..30013                      |         |                     |
| GI Descrip. | (AF030260) CYP94A1 [Vicia sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22147                     | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46141                     | Strand  | -                   |
| Start    | 31564                     | End     | 34292               |
| Name     | OJ990705_39.9919.C9.o3.gp | Method  | AAT/GAP             |
| Start    | 31544                     | End     | 31993               |
| GI       | none                      | Score   | 859                 |
| Exons    | 31544..31993              |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46141  | Strand  | -                   |
| Start    | 31564  | End     | 34292               |
| Name     | OJ990705_39.9919.C9.o9.gs  | Method  | GENSCAN             |
| Start    | 31564  | End     | 34292               |
| GI       | none   | Score   | .9                  |
| Exons    | 31564..31757, 32029..32293, 32373..32483, 32822..32983, 34266..34292 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o8.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 4863   | End     | 5465                |
| GI       | none   | Score   | 79                  |
| Exons    | 4863..4988, 4867..4989, 5181..5465, 5182..5460 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o4.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 5466   | End     | 5847                |
| GI       | none   | Score   | 168                 |
| Exons    | 5466..5846, 5497..5745, 5505..5843, 5791..5847 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22147                              | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142                              | Strand  | -                   |
| Start    | 38547                              | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o6.tm          | Method  | TBLASTX:Maize       |
| Start    | 5661                               | End     | 5985                |
| GI       | none                               | Score   | 178                 |
| Exons    | 5661..5885, 5674..5886, 5890..5985 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22147                     | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142                     | Strand  | -                   |
| Start    | 38547                     | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o9.tw | Method  | TBLASTX:Wheat       |
| Start    | 6177                      | End     | 6489                |
| GI       | none                      | Score   | 69                  |
| Exons    | 6177..6437, 6313..6489    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o5.tw  | Method  | TBLASTX:Wheat       |
| Start    | 6492   | End     | 9949                |
| GI       | none   | Score   | 88                  |
| Exons    | 6492..6641, 6493..6630, 6675..6926, 6676..6861, 6696..6950, 9896..9949 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22147                     | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142                     | Strand  | -                   |
| Start    | 38547                     | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o3.ts | Method  | TBLASTX:Soybean     |
| Start    | 7551                      | End     | 7922                |
| GI       | none                      | Score   | 91                  |
| Exons    | 7551..7922, 7747..7905    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22147                     | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142                     | Strand  | -                   |
| Start    | 38547                     | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o2.tw | Method  | TBLASTX:Wheat       |
| Start    | 7581                      | End     | 8001                |
| GI       | none                      | Score   | 316                 |
| Exons    | 7581..8000, 7588..8001    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22147                     | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142                     | Strand  | -                   |
| Start    | 38547                     | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o4.tm | Method  | TBLASTX:Maize       |
| Start    | 7674                      | End     | 8058                |
| GI       | none                      | Score   | 233                 |
| Exons    | 7674..8057, 7693..8058    |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22147                              | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142                              | Strand  | -                   |
| Start    | 38547                              | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o3.tm          | Method  | TBLASTX:Maize       |
| Start    | 8085                               | End     | 8441                |
| GI       | none                               | Score   | 125                 |
| Exons    | 8085..8390, 8085..8441, 8095..8406 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o1.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 8109   | End     | 8572                |
| GI       | none   | Score   | 227                 |
| Exons    | 8109..8570, 8115..8570, 8116..8571, 8129..8572 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22147                     | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142                     | Strand  | -                   |
| Start    | 38547                     | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o6.ts | Method  | TBLASTX:Soybean     |
| Start    | 8166                      | End     | 8531                |
| GI       | none                      | Score   | 118                 |
| Exons    | 8166..8300, 8307..8531    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o3.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 8736   | End     | 9222                |
| GI       | none   | Score   | 77                  |
| Exons    | 8736..9221, 8763..9017, 8767..9027, 9085..9222 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o7.tw  | Method  | TBLASTX:Wheat       |
| Start    | 9957   | End     | 10509               |
| GI       | none   | Score   | 92                  |
| Exons    | 9957..10214, 9991..10230, 10197..10295, 10198..10290, 10302..10349, 10474..10509 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22147                      | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142                      | Strand  | -                   |
| Start    | 38547                      | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o8.tm  | Method  | TBLASTX:Maize       |
| Start    | 10059                      | End     | 10344               |
| GI       | none                       | Score   | 92                  |
| Exons    | 10059..10307, 10060..10344 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o9.tm  | Method  | TBLASTX:Maize       |
| Start    | 12193  | End     | 13173               |
| GI       | none   | Score   | 191                 |
| Exons    | 12193..12384, 12197..12379, 13020..13151, 13028..13165, 13030..13173 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o5.ts  | Method  | TBLASTX:Soybean     |
| Start    | 19309  | End     | 38704               |
| GI       | none   | Score   | 63                  |
| Exons    | 19309..19389, 19363..19434, 38254..38334, 38258..38335, 38510..38704, 38515..38688 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 20004  | End     | 29905               |
| GI       | none   | Score   | 60                  |
| Exons    | 20004..20051, 20055..20411, 20057..20323, 20163..20411, 29498..29749, 29522..29854, 29586..29852, 29858..29905 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22147                     | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142                     | Strand  | -                   |
| Start    | 38547                     | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o1.ts | Method  | TBLASTX:Soybean     |

|       |   |       |       |
|-------|---|-------|-------|
| Start | 20165   | End   | 29740 |
| GI    | none  | Score | 213   |
| Exons | 20165..20323, 20169..20411, 20445..20558, 20565..20744,<br>20807..20908, 20808..20948, 20976..21047, 20988..21221,<br>21044..21220, 21221..21328, 21222..21368, 21390..21446,<br>28463..28519, 28541..28687, 28587..28688, 28688..28921,<br>28689..28934, 28961..29101, 29010..29102, 29165..29326,<br>29375..29428, 29522..29740, 29586..29738 |       |       |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22147   | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142   | Strand  | -                   |
| Start    | 38547   | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o1.tc   | Method  | TBLASTX:Cress       |
| Start    | 20169   | End     | 29744               |
| GI       | none  | Score   | 189                 |
| Exons    | 20169..20411, 20180..20323, 20454..20537, 20976..21068,<br>21089..21229, 21090..21227, 21237..21356, 21254..21322,<br>28568..28672, 28587..28655, 28680..28820, 28682..28819,<br>28841..28933, 28848..28934, 28949..29098, 29016..29099,<br>29075..29143, 29156..29269, 29372..29422, 29552..29740,<br>29586..29744 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 20454  | End     | 29231               |
| GI       | none   | Score   | 80                  |
| Exons    | 20454..20543, 20537..20560, 20660..20725, 20766..20843,<br>20807..20890, 20874..20948, 20957..21226, 20958..21227,<br>21249..21365, 21251..21325, 28544..28660, 28584..28658,<br>28682..28951, 28683..28955, 28949..29107, 29019..29102,<br>29184..29231 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o6.tw  | Method  | TBLASTX:Wheat       |
| Start    | 20807  | End     | 29125               |
| GI       | none   | Score   | 73                  |
| Exons    | 20807..20890, 20808..20960, 20874..20948, 20952..21206,<br>20957..21205, 28703..28951, 28704..28955, 28949..29125,<br>29019..29102 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22147   | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142   | Strand  | -                   |
| Start    | 38547   | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o2.tc   | Method  | TBLASTX:Cress       |
| Start    | 23624   | End     | 25411               |
| GI       | none  | Score   | 63                  |
| Exons    | 23624..23830, 23636..23767, 23888..24247, 23889..24152,<br>23894..24091, 23895..24251, 23897..24160, 23981..24163,<br>23981..24352, 24098..24289, 24104..24475, 24203..24421,<br>24209..24616, 24308..24499, 24312..24626, 24314..24667,<br>24318..24686, 24395..24622, 24410..24823, 24495..24824,<br>24512..24691, 24527..24880, 24605..24814, 24606..24878,<br>24612..24983, 24632..24997, 24728..24919, 24731..24934, |         |                     |

24734..25087, 24836..25015, 24842..25192, 24953..25273,  
25028..25201, 25055..25402, 25151..25360, 25154..25402,  
25223..25411

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o7.tm  | Method  | TBLASTX:Maize       |
| Start    | 23627  | End     | 25411               |
| GI       | none   | Score   | 147                 |
| Exons    | 23627..23782, 23894..24361, 23897..24460, 23960..24562,<br>24053..24676, 24173..24772, 24356..24991, 24452..25096,<br>24566..25201, 24812..25411, 24989..25411 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 23639  | End     | 25306               |
| GI       | none   | Score   | 71                  |
| Exons    | 23639..23806, 23882..24247, 23897..24577, 23897..24268,<br>23918..24055, 24008..24778, 24008..24370, 24009..24164,<br>24011..24877, 24024..24143, 24029..24142, 24104..24241,<br>24197..24340, 24221..25075, 24225..24386, 24246..24365,<br>24266..24433, 24452..25276, 24527..24655, 24528..24668,<br>24551..25171, 24558..24914, 24620..24982, 24653..25276,<br>24842..25177, 24842..24964, 24983..25096, 25154..25306 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22147  | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142  | Strand  | -                   |
| Start    | 38547  | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o3.tc  | Method  | TBLASTX:Cress       |
| Start    | 26415  | End     | 32899               |
| GI       | none   | Score   | 52                  |
| Exons    | 26415..26528, 26544..26600, 26580..26666, 27086..27175,<br>27093..27170, 27272..27331, 27282..27329, 27478..27549,<br>27656..27718, 31537..31620, 31639..31758, 31980..32063,<br>31987..32064, 32162..32275, 32364..32486, 32425..32487,<br>32594..32671, 32598..32642, 32837..32899 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22147   | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142   | Strand  | -                   |
| Start    | 38547   | End     | 42026               |
| Name     | OJ990705_39.9919.C9.o5.tm   | Method  | TBLASTX:Maize       |
| Start    | 26601   | End     | 32949               |
| GI       | none  | Score   | 95                  |
| Exons    | 26601..26666, 26763..26870, 27091..27204, 27092..27205,<br>27093..27215, 27257..27331, 27258..27332, 27266..27370,<br>27478..27549, 27497..27574, 27656..27718, 27785..27898,<br>31669..31758, 31691..31759, 31980..32063, 31987..32064,<br>32162..32293, 32175..32318, 32194..32289, 32244..32294,<br>32370..32483, 32371..32484, 32374..32484, 32378..32488,<br>32381..32497, 32594..32653, 32598..32654, 32599..32655,<br>32822..32887, 32826..32888, 32878..32949 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22147 | Seq. ID | OJ990705_39.9919.C9 |
| Gene No. | 46142 | Strand  | -                   |

|             |   |        |         |
|-------------|---|--------|---------|
| Start       | 38547   | End    | 42026   |
| Name        | OJ990705_39.9919.C9.o10.np  | Method | AAT/NAP |
| Start       | 38547   | End    | 42026   |
| GI          | 6523547   | Score  | 139     |
| Exons       | 38547..38647, 39835..40015, 40373..40407, 40485..40553, 41928..42026                |        |         |
| GI Descrip. | (AJ242540) hydroxyproline-rich glycoprotein DZ-HRGP [Volvox carteri f. nagariensis] |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22148                      | Seq. ID | OJ990705_39.9919.C10 |
| Gene No. | 46143                      | Strand  | +                    |
| Start    | 986                        | End     | 2073                 |
| Name     | OJ990705_39.9919.C10.o1.gs | Method  | GENSCAN              |
| Start    | 986                        | End     | 2073                 |
| GI       | none                       | Score   | .93                  |
| Exons    | 986..1168, 1291..2073      |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22148   | Seq. ID | OJ990705_39.9919.C10 |
| Gene No.    | 46143   | Strand  | +                    |
| Start       | 986   | End     | 2073                 |
| Name        | OJ990705_39.9919.C10.o1.np  | Method  | AAT/NAP              |
| Start       | 1013  | End     | 2070                 |
| GI          | 542058  | Score   | 633                  |
| Exons       | 1013..1469, 1506..2070  |         |                      |
| GI Descrip. | HSR203J protein - common tobacco gi 444002 emb CAA54393  (X77136) HSR203J [Nicotiana tabacum] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22148                      | Seq. ID | OJ990705_39.9919.C10 |
| Gene No. | 46144                      | Strand  | +                    |
| Start    | 2146                       | End     | 2426                 |
| Name     | OJ990705_39.9919.C10.o1.gp | Method  | AAT/GAP              |
| Start    | 2146                       | End     | 2426                 |
| GI       | none                       | Score   | 380                  |
| Exons    | 2146..2426                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22148  | Seq. ID | OJ990705_39.9919.C10 |
| Gene No.    | 46145  | Strand  | +                    |
| Start       | 3841   | End     | 4017                 |
| Name        | OJ990705_39.9919.C10.o2.gp   | Method  | AAT/GAP              |
| Start       | 3841   | End     | 4017                 |
| GI          | 10431_1.R1084  | Score   | 307                  |
| Exons       | 3841..4017   |         |                      |
| GI Descrip. | '1256198/dbj D63711 RICTNR3 4.0e-82 Rice transposon Tnr3 DNA, complete sequence' |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22148   | Seq. ID | OJ990705_39.9919.C10 |
| Gene No. | 46146   | Strand  | -                    |
| Start    | 3253  | End     | 3274                 |
| Name     | OJ990705_39.9919.C10.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 977   | End     | 1584                 |
| GI       | none  | Score   | 76                   |
| Exons    | 977..1087, 1094..1171, 1261..1329, 1280..1324, 1326..1463, 1345..1464, 1495..1572, 1516..1584 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22148 | Seq. ID | OJ990705_39.9919.C10 |
| Gene No. | 46146 | Strand  | -                    |
| Start    | 3253  | End     | 3274                 |



|       |  |        |                 |
|-------|--|--------|-----------------|
| Name  | OJ990705_39.9919.C10.o1.ts   | Method | TBLASTX:Soybean |
| Start | 1025   | End    | 1809            |
| GI    | none   | Score  | 76              |
| Exons | 1025..1087, 1261..1281, 1280..1321, 1357..1452, 1387..1440, 1513..1572, 1545..1568, 1626..1778, 1636..1809 |        |                 |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22148                      | Seq. ID | OJ990705_39.9919.C10 |
| Gene No. | 46146                      | Strand  | -                    |
| Start    | 3253                       | End     | 3274                 |
| Name     | OJ990705_39.9919.C10.o2.gs | Method  | GENSCAN              |
| Start    | 3253                       | End     | 3274                 |
| GI       | none                       | Score   | .45                  |
| Exons    | 3253..3274                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22149                      | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46147                      | Strand  | +                    |
| Start    | 967                        | End     | 1146                 |
| Name     | OJ990705_39.9919.C11.o1.gs | Method  | GENSCAN              |
| Start    | 967                        | End     | 1146                 |
| GI       | none                       | Score   | .47                  |
| Exons    | 967..1146                  |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22149                      | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46148                      | Strand  | +                    |
| Start    | 1675                       | End     | 2777                 |
| Name     | OJ990705_39.9919.C11.o1.gp | Method  | AAT/GAP              |
| Start    | 1675                       | End     | 1975                 |
| GI       | none                       | Score   | 598                  |
| Exons    | 1675..1975                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22149   | Seq. ID | OJ990705_39.9919.C11 |
| Gene No.    | 46148   | Strand  | +                    |
| Start       | 1675  | End     | 2777                 |
| Name        | OJ990705_39.9919.C11.o1.np  | Method  | AAT/NAP              |
| Start       | 1755  | End     | 2777                 |
| GI          | 542058  | Score   | 683                  |
| Exons       | 1755..2777  |         |                      |
| GI Descrip. | HSR203J protein - common tobacco gi 444002 emb CAA54393  (X77136) HSR203J [Nicotiana tabacum] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22149                      | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46149                      | Strand  | +                    |
| Start    | 8147                       | End     | 9448                 |
| Name     | OJ990705_39.9919.C11.o4.gs | Method  | GENSCAN              |
| Start    | 8147                       | End     | 9433                 |
| GI       | none                       | Score   | .47                  |
| Exons    | 8147..9433                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No.    | 46149  | Strand  | +                    |
| Start       | 8147   | End     | 9448                 |
| Name        | OJ990705_39.9919.C11.o3.np                         | Method  | AAT/NAP              |
| Start       | 8366   | End     | 9448                 |
| GI          | 4049341  | Score   | 1173                 |
| Exons       | 8366..9448   |         |                      |
| GI Descrip. | (AL034567) putative protein [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No.    | 46150  | Strand  | +                    |
| Start       | 13079  | End     | 24358                |
| Name        | OJ990705_39.9919.C11.o4.np   | Method  | AAT/NAP              |
| Start       | 13079  | End     | 15829                |
| GI          | 2252863  | Score   | 784                  |
| Exons       | 13079..13513, 13554..13711, 14285..14441, 14517..14691, 14785..14991, 15113..15285, 15387..15478, 15625..15718, 15773..15829 |         |                      |
| GI Descrip. | (AF013294) similar to nucleolin protein [Arabidopsis thaliana]   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46150  | Strand  | +                    |
| Start    | 13079  | End     | 24358                |
| Name     | OJ990705_39.9919.C11.o5.gs   | Method  | GENSCAN              |
| Start    | 13079  | End     | 19296                |
| GI       | none   | Score   | .62                  |
| Exons    | 13079..13231, 13259..13495, 13578..13688, 14298..14438, 14517..14687, 14787..14991, 15113..15285, 15396..15426, 15625..15764, 15997..16050, 16086..16157, 16293..16476, 17446..17838, 18266..18373, 18711..18795, 19007..19227, 19262..19296 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No.    | 46150  | Strand  | +                    |
| Start       | 13079  | End     | 24358                |
| Name        | OJ990705_39.9919.C11.o4.gp   | Method  | AAT/GAP              |
| Start       | 13295  | End     | 14444                |
| GI          | 2280544  | Score   | 816                  |
| Exons       | 13295..13495, 13578..13688, 14298..14444                                       |         |                      |
| GI Descrip. | 2252863 3.0e-27 (AF013294) similar to nucleolin protein [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No.    | 46150  | Strand  | +                    |
| Start       | 13079  | End     | 24358                |
| Name        | OJ990705_39.9919.C11.o5.gp   | Method  | AAT/GAP              |
| Start       | 14519  | End     | 15418                |
| GI          | 20710_1.R1084  | Score   | 1022                 |
| Exons       | 14519..14687, 14787..14991, 15113..15285, 15396..15418                           |         |                      |
| GI Descrip. | '2252863 3.0e-27 (AF013294) similar to nucleolin protein [Arabidopsis thaliana]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No.    | 46150  | Strand  | +                    |
| Start       | 13079  | End     | 24358                |
| Name        | OJ990705_39.9919.C11.o5.np                             | Method  | AAT/NAP              |
| Start       | 17301  | End     | 17765                |
| GI          | 4581120  | Score   | 358                  |
| Exons       | 17301..17765   |         |                      |
| GI Descrip. | (AC005825) hypothetical protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22149                      | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46150                      | Strand  | +                    |
| Start    | 13079                      | End     | 24358                |
| Name     | OJ990705_39.9919.C11.o6.np | Method  | AAT/NAP              |
| Start    | 18293                      | End     | 19213                |

GI 6498461 Score 801  
 Exons 18293..18373, 18598..18684, 18711..18795, 18890..19213  
 GI Descrip. (AP000816) hypothetical protein [Oryza sativa]

Seq. No. 22149 Seq. ID OJ990705\_39.9919.C11  
 Gene No. 46150 Strand +  
 Start 13079 End 24358  
 Name OJ990705\_39.9919.C11.o7.np Method AAT/NAP  
 Start 19121 End 24137  
 GI 3461846 Score 748  
 Exons 19121..19173, 22930..24137  
 GI Descrip. (AC005315) putative SCARECROW gene regulator [Arabidopsis thaliana]

Seq. No. 22149 Seq. ID OJ990705\_39.9919.C11  
 Gene No. 46150 Strand +  
 Start 13079 End 24358  
 Name OJ990705\_39.9919.C11.o7.gs Method GENSCAN  
 Start 22492 End 24358  
 GI none Score .67  
 Exons 22492..23685, 23730..24144, 24255..24358

Seq. No. 22149 Seq. ID OJ990705\_39.9919.C11  
 Gene No. 46151 Strand -  
 Start 3809 End 7015  
 Name OJ990705\_39.9919.C11.o3.gs Method GENSCAN  
 Start 3809 End 7015  
 GI none Score .84  
 Exons 3809..3891, 4773..4809, 6052..6181, 6375..6571, 6866..7015

Seq. No. 22149 Seq. ID OJ990705\_39.9919.C11  
 Gene No. 46151 Strand -  
 Start 3809 End 7015  
 Name OJ990705\_39.9919.C11.o2.np Method AAT/NAP  
 Start 4502 End 6171  
 GI 4512415 Score 128  
 Exons 4502..4595, 4706..4809, 6052..6171  
 GI Descrip. (AB017508) rplX homologue (identity of 84% to B. subtilis ) [Bacillus halodurans]

Seq. No. 22149 Seq. ID OJ990705\_39.9919.C11  
 Gene No. 46151 Strand -  
 Start 3809 End 7015  
 Name OJ990705\_39.9919.C11.o2.gp Method AAT/GAP  
 Start 4689 End 4811  
 GI LIB3434-014-P1-K1-D7 Score 160  
 Exons 4689..4811  
 GI Descrip. '3861188/emb|CAA15088| 7.0e-18 (AJ235272) 50S RIBOSOMAL PROTEIN L24 (rplX) [Rickettsia prowazekii]'

Seq. No. 22149 Seq. ID OJ990705\_39.9919.C11  
 Gene No. 46151 Strand -  
 Start 3809 End 7015  
 Name OJ990705\_39.9919.C11.o3.gp Method AAT/GAP  
 Start 6048 End 6420  
 GI LIB3434-014-P1-K1-D7 Score 448  
 Exons 6048..6147, 6235..6420

GI Descrip. '3861188/emb|CAA15088| 7.0e-18 (AJ235272) 50S RIBOSOMAL PROTEIN  
L24 (rplX) [Rickettsia prowazekii]'

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22149                      | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46152                      | Strand  | -                    |
| Start    | 21680                      | End     | 21883                |
| Name     | OJ990705_39.9919.C11.o6.gs | Method  | GENSCAN              |
| Start    | 21680                      | End     | 21883                |
| GI       | none                       | Score   | .64                  |
| Exons    | 21680..21696, 21745..21883 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22149   | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153   | Strand  | -                    |
| Start    | 22474   | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o4.tm  | Method  | TBLASTX:Maize        |
| Start    | 1773  | End     | 2291                 |
| GI       | none  | Score   | 64                   |
| Exons    | 1773..1829, 1832..1921, 1833..1979, 1973..2071, 1977..2063,<br>2057..2275, 2073..2291 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o4.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1773   | End     | 2540                 |
| GI       | none   | Score   | 71                   |
| Exons    | 1773..1829, 1832..1927, 1833..1928, 1976..2011, 1977..2063,<br>2085..2180, 2087..2179, 2223..2297, 2237..2296, 2331..2540,<br>2369..2479 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o7.tm                     | Method  | TBLASTX:Maize        |
| Start    | 2535   | End     | 2871                 |
| GI       | none   | Score   | 113                  |
| Exons    | 2535..2663, 2643..2780, 2664..2780, 2836..2871 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22149   | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153   | Strand  | -                    |
| Start    | 22474   | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o2.tw  | Method  | TBLASTX:Wheat        |
| Start    | 3771  | End     | 4810                 |
| GI       | none  | Score   | 122                  |
| Exons    | 3771..3890, 3809..3889, 4460..4594, 4461..4595, 4463..4597,<br>4693..4809, 4703..4810, 4704..4808, 4705..4809 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o5.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3809   | End     | 6303                 |
| GI       | none   | Score   | 87                   |
| Exons    | 3809..3889, 3816..3890, 4395..4415, 4458..4595, 4463..4594,<br>4466..4597, 4693..4809, 4705..4809, 6049..6147, 6050..6100,<br>6232..6303, 6233..6298 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o5.tm   | Method  | TBLASTX:Maize        |
| Start    | 4518   | End     | 6295                 |
| GI       | none   | Score   | 119                  |
| Exons    | 4518..4595, 4520..4597, 4520..4594, 4522..4596, 4693..4809, 4703..4810, 4704..4805, 4705..4809, 6047..6100, 6047..6145, 6049..6147, 6051..6113, 6052..6150, 6226..6270, 6232..6294, 6233..6295 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 8407   | End     | 9322                 |
| GI       | none   | Score   | 231                  |
| Exons    | 8407..8823, 8411..8548, 8612..9055, 8819..9055, 9050..9322, 9088..9285, 9152..9301 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22149                      | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153                      | Strand  | -                    |
| Start    | 22474                      | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o3.tw | Method  | TBLASTX:Wheat        |
| Start    | 8407                       | End     | 8548                 |
| GI       | none                       | Score   | 229                  |
| Exons    | 8407..8547, 8411..8548     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o1.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 8411   | End     | 8854                 |
| GI       | none   | Score   | 214                  |
| Exons    | 8411..8548, 8420..8533, 8428..8547, 8612..8854, 8635..8823 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o3.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 8411   | End     | 8803                 |
| GI       | none   | Score   | 217                  |
| Exons    | 8411..8548, 8414..8533, 8428..8547, 8612..8803, 8623..8787 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o1.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 8672   | End     | 8973                 |
| GI       | none   | Score   | 399                  |
| Exons    | 8672..8971, 8674..8823, 8819..8971, 8926..8973, 8929..8973 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22149                      | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153                      | Strand  | -                    |
| Start    | 22474                      | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 8804                       | End     | 9322                 |

|       |  |       |     |
|-------|--|-------|-----|
| GI    | none   | Score | 339 |
| Exons | 8804..9052, 8819..9052, 9080..9235, 9094..9234, 9235..9285, 9236..9322 |       |     |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 13323  | End     | 15476                |
| GI       | none   | Score   | 127                  |
| Exons    | 13323..13502, 13324..13503, 13362..13496, 13364..13498, 13364..13507, 13576..13689, 13587..13688, 13591..13689, 14292..14438, 14293..14388, 14296..14439, 14297..14455, 14297..14437, 14515..14652, 14516..14662, 14529..14684, 14529..14663, 14531..14674, 14780..14992, 14784..15011, 14786..14971, 15064..15159, 15068..15178, 15146..15232, 15150..15260, 15171..15233, 15248..15295, 15249..15296, 15392..15475, 15393..15476 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 13352  | End     | 15479                |
| GI       | none   | Score   | 110                  |
| Exons    | 13352..13432, 13354..13431, 13356..13445, 13445..13498, 14291..14416, 14298..14438, 14517..14696, 14534..14689, 14539..14697, 14765..14902, 14768..14896, 14784..14909, 14877..15014, 14912..14971, 15414..15479 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153  | Strand  | -                    |
| Start    | 22474  | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 13602  | End     | 14825                |
| GI       | none   | Score   | 81                   |
| Exons    | 13602..13688, 14295..14438, 14298..14441, 14531..14662, 14532..14684, 14781..14825 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22149                      | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46153                      | Strand  | -                    |
| Start    | 22474                      | End     | 22728                |
| Name     | OJ990705_39.9919.C11.o6.gp | Method  | AAT/GAP              |
| Start    | 22474                      | End     | 22728                |
| GI       | 427569                     | Score   | 490                  |
| Exons    | 22474..22728               |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22149                      | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46154                      | Strand  | -                    |
| Start    | 22978                      | End     | 23202                |
| Name     | OJ990705_39.9919.C11.o6.tm | Method  | TBLASTX:Maize        |
| Start    | 22978                      | End     | 23202                |
| GI       | none                       | Score   | 221                  |
| Exons    | 22978..23202               |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22149 | Seq. ID | OJ990705_39.9919.C11 |
| Gene No. | 46154 | Strand  | -                    |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Start       | 22978  | End     | 23202                |
| Name        | OJ990705_39.9919.C11.o7.ts   | Method  | TBLASTX:Soybean      |
| Start       | 22984  | End     | 23151                |
| GI          | none   | Score   | 188                  |
| Exons       | 22984..23151, 23010..23096, 23017..23145   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No.    | 46155  | Strand  |                      |
| Start       | 23182  | End     | 24137                |
| Name        | OJ990705_39.9919.C11.o3.tc   | Method  | TBLASTX:Cress        |
| Start       | 23182  | End     | 23840                |
| GI          | none   | Score   | 112                  |
| Exons       | 23182..23349, 23392..23541, 23605..23670, 23697..23840   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No.    | 46155  | Strand  |                      |
| Start       | 23182  | End     | 24137                |
| Name        | OJ990705_39.9919.C11.o3.tm   | Method  | TBLASTX:Maize        |
| Start       | 23203  | End     | 24128                |
| GI          | none   | Score   | 92                   |
| Exons       | 23203..23337, 23341..23544, 23352..23519, 23542..23577, 23596..23679, 23694..23840, 23711..23800, 23826..23978, 23933..23977, 24056..24127, 24069..24128 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22149  | Seq. ID | OJ990705_39.9919.C11 |
| Gene No.    | 46155  | Strand  |                      |
| Start       | 23182  | End     | 24137                |
| Name        | OJ990705_39.9919.C11.o6.ts   | Method  | TBLASTX:Soybean      |
| Start       | 23443  | End     | 24137                |
| GI          | none   | Score   | 101                  |
| Exons       | 23443..23541, 23697..23840, 23711..23800, 23931..23978, 23933..23977, 24056..24124, 24069..24137   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22150  | Seq. ID | OJ990515_21.9922.C1  |
| Gene No.    | 46156  | Strand  | -                    |
| Start       | 1489   | End     | 6005                 |
| Name        | OJ990515_21.9922.C1.o2.tm  | Method  | TBLASTX:Maize        |
| Start       | 1268   | End     | 1635                 |
| GI          | none   | Score   | 226                  |
| Exons       | 1268..1303, 1310..1537, 1311..1529, 1336..1533, 1337..1534, 1593..1625, 1594..1635   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22150  | Seq. ID | OJ990515_21.9922.C1  |
| Gene No.    | 46156  | Strand  | -                    |
| Start       | 1489   | End     | 6005                 |
| Name        | OJ990515_21.9922.C1.o1.np  | Method  | AAT/NAP              |
| Start       | 1489   | End     | 5957                 |
| GI          | 6815097  | Score   | 2853                 |
| Exons       | 1489..2201, 2342..4001, 4116..4721, 5057..5957   |         |                      |
| GI Descrip. | (AP001081) Similar to putative copia polyprotein (AC006248) [Oryza sativa]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22150  | Seq. ID | OJ990515_21.9922.C1  |
| Gene No.    | 46156  | Strand  | -                    |
| Start       | 1489   | End     | 6005                 |
| Name        | OJ990515_21.9922.C1.o2.ts  | Method  | TBLASTX:Soybean      |
| Start       | 1635   | End     | 1997                 |

GI none  
Exons 1635..1997

Score 188

Seq. No. 22150  
Gene No. 46156  
Start 1489  
Name OJ990515\_21.9922.C1.o1.tm  
Start 1656  
GI none  
Exons 1656..1979, 1657..1968

Seq. ID OJ990515\_21.9922.C1  
Strand -  
End 6005  
Method TBLASTX:Maize  
End 1979  
Score 190

Seq. No. 22150  
Gene No. 46156  
Start 1489  
Name OJ990515\_21.9922.C1.o1.ts  
Start 2369  
GI 5509260  
Exons 2369..2449, 2377..2448, 2476..2562, 2608..2811, 2629..2814  
GI Descrip. -

Seq. ID OJ990515\_21.9922.C1  
Strand -  
End 6005  
Method TBLASTX:Soybean  
End 2814  
Score 82

Seq. No. 22150  
Gene No. 46156  
Start 1489  
Name OJ990515\_21.9922.C1.o1.tw  
Start 2383  
GI none  
Exons 2383..2448, 2480..2563, 2482..2733, 2608..2727, 2643..2759

Seq. ID OJ990515\_21.9922.C1  
Strand -  
End 6005  
Method TBLASTX:Wheat  
End 2759  
Score 45

Seq. No. 22150  
Gene No. 46156  
Start 1489  
Name OJ990515\_21.9922.C1.o3.gs  
Start 5101  
GI none  
Exons 5101..5531, 5966..6005

Seq. ID OJ990515\_21.9922.C1  
Strand -  
End 6005  
Method GENSCAN  
End 6005  
Score .49

Seq. No. 22151  
Gene No. 46157  
Start 479  
Name OJ990515\_21.9922.C2.o1.gs  
Start 479  
GI none  
Exons 479..593, 742..792, 1207..1259, 2208..2324, 2383..2499, 5138..6061, 6280..6436, 6688..6876, 6951..7135, 7211..7400, 7473..7577, 7650..8098

Seq. ID OJ990515\_21.9922.C2  
Strand +  
End 8098  
Method GENSCAN  
End 8098  
Score .8

Seq. No. 22151  
Gene No. 46157  
Start 479  
Name OJ990515\_21.9922.C2.o1.np  
Start 5177  
GI 6691716  
Exons 5177..6047, 6245..6436, 6518..6630, 6707..6876, 6960..7135, 7211..7322, 7473..7577, 7650..8095  
GI Descrip. (AP000492) hypothetical protein [Oryza sativa]  
gi|6691717|dbj|BAA89397.1| (AP000570) hypothetical protein [Oryza sativa]

Seq. ID OJ990515\_21.9922.C2  
Strand +  
End 8098  
Method AAT/NAP  
End 8095  
Score 2407



Seq. No. 22151  
Gene No. 46158  
Start 8414  
Name OJ990515\_21.9922.C2.o2.gs  
Start 8414  
GI none  
Exons 8414..11495, 11592..14524

Seq. ID OJ990515\_21.9922.C2  
Strand -  
End 14524  
Method GENSCAN  
End 14524  
Score .94

Seq. No. 22151  
Gene No. 46158  
Start 8414  
Name OJ990515\_21.9922.C2.o2.np  
Start 8450  
GI 5922631  
Exons 8450..10977, 11584..12507, 12634..12785, 12828..13392, 13438..13647, 13897..14141, 14400..14524

Seq. ID OJ990515\_21.9922.C2  
Strand -  
End 14524  
Method AAT/NAP  
End 14524  
Score 6715

GI Descrip. (AP000492) ESTs C26347(C12145), AU078074(C12145) correspond to a region of the predicted gene.; similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativa] gi|6016864|dbj|BAA85207.1| (AP000570) ESTs C26347(C12145), AU078074(C12145) correspond to a region of the predicted gene.; Similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativ

Seq. No. 22151  
Gene No. 46159  
Start 16852  
Name OJ990515\_21.9922.C2.o9.tw  
Start 5297  
GI none  
Exons 5297..5587

Seq. ID OJ990515\_21.9922.C2  
Strand -  
End 17355  
Method TBLASTX:Wheat  
End 5587  
Score 217

Seq. No. 22151  
Gene No. 46159  
Start 16852  
Name OJ990515\_21.9922.C2.o5.tw  
Start 8426  
GI none  
Exons 8426..8563, 8549..8707, 8762..9040, 8778..8885, 8931..9020

Seq. ID OJ990515\_21.9922.C2  
Strand -  
End 17355  
Method TBLASTX:Wheat  
End 9040  
Score 75

Seq. No. 22151  
Gene No. 46159  
Start 16852  
Name OJ990515\_21.9922.C2.o4.tm  
Start 8463  
GI none  
Exons 8463..8567, 8465..8566, 8546..8698

Seq. ID OJ990515\_21.9922.C2  
Strand -  
End 17355  
Method TBLASTX:Maize  
End 8698  
Score 104

Seq. No. 22151  
Gene No. 46159  
Start 16852  
Name OJ990515\_21.9922.C2.o6.tm  
Start 8810  
GI none  
Exons 8810..8896, 8906..8989, 8919..8993, 8976..9083, 8984..9082

Seq. ID OJ990515\_21.9922.C2  
Strand -  
End 17355  
Method TBLASTX:Maize  
End 9083  
Score 56

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22151                              | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159                              | Strand  | -                   |
| Start    | 16852                              | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o3.tw          | Method  | TBLASTX:Wheat       |
| Start    | 9155                               | End     | 9542                |
| GI       | none                               | Score   | 114                 |
| Exons    | 9155..9346, 9155..9541, 9231..9542 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22151  | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159  | Strand  | -                   |
| Start    | 16852  | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o1.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 9185   | End     | 9548                |
| GI       | none   | Score   | 67                  |
| Exons    | 9185..9232, 9186..9233, 9213..9359, 9224..9547, 9237..9548 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22151                      | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159                      | Strand  | -                   |
| Start    | 16852                      | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o10.tw | Method  | TBLASTX:Wheat       |
| Start    | 9545                       | End     | 9844                |
| GI       | none                       | Score   | 130                 |
| Exons    | 9545..9685, 9710..9844     |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22151                     | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159                     | Strand  | -                   |
| Start    | 16852                     | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o5.tm | Method  | TBLASTX:Maize       |
| Start    | 9776                      | End     | 10030               |
| GI       | none                      | Score   | 193                 |
| Exons    | 9776..10030               |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22151                     | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159                     | Strand  | -                   |
| Start    | 16852                     | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o4.tw | Method  | TBLASTX:Wheat       |
| Start    | 9860                      | End     | 10282               |
| GI       | none                      | Score   | 266                 |
| Exons    | 9860..10282, 9870..10274  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22151                                  | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159                                  | Strand  | -                   |
| Start    | 16852                                  | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o2.ts              | Method  | TBLASTX:Soybean     |
| Start    | 9903                                   | End     | 10291               |
| GI       | none                                   | Score   | 157                 |
| Exons    | 9903..10283, 9905..10147, 10187..10291 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22151  | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159  | Strand  | -                   |
| Start    | 16852  | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o8.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 10282  | End     | 10568               |
| GI       | none   | Score   | 70                  |
| Exons    | 10282..10380, 10286..10567, 10298..10432, 10491..10568 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22151 | Seq. ID | OJ990515_21.9922.C2 |
|----------|-------|---------|---------------------|

|          |  |         |                     |
|----------|--|---------|---------------------|
| Gene No. | 46159  | Strand  | -                   |
| Start    | 16852  | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 10406  | End     | 10850               |
| GI       | none   | Score   | 89                  |
| Exons    | 10406..10432, 10430..10573, 10443..10574, 10589..10825, 10595..10849, 10596..10850 |         |                     |
|          |  |         |                     |
| Seq. No. | 22151  | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159  | Strand  | -                   |
| Start    | 16852  | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 10517  | End     | 10918               |
| GI       | none   | Score   | 123                 |
| Exons    | 10517..10918, 10758..10901   |         |                     |
|          |  |         |                     |
| Seq. No. | 22151  | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159  | Strand  | -                   |
| Start    | 16852  | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o2.tw  | Method  | TBLASTX:Wheat       |
| Start    | 10572  | End     | 10996               |
| GI       | none   | Score   | 287                 |
| Exons    | 10572..10952, 10572..10931, 10586..10996   |         |                     |
|          |  |         |                     |
| Seq. No. | 22151  | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159  | Strand  | -                   |
| Start    | 16852  | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 11081  | End     | 11437               |
| GI       | none   | Score   | 210                 |
| Exons    | 11081..11437, 11091..11390   |         |                     |
|          |  |         |                     |
| Seq. No. | 22151  | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159  | Strand  | -                   |
| Start    | 16852  | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 11111  | End     | 11566               |
| GI       | none   | Score   | 257                 |
| Exons    | 11111..11566, 11112..11531, 11141..11539   |         |                     |
|          |  |         |                     |
| Seq. No. | 22151  | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159  | Strand  | -                   |
| Start    | 16852  | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 11162  | End     | 11527               |
| GI       | none   | Score   | 134                 |
| Exons    | 11162..11296, 11303..11527   |         |                     |
|          |  |         |                     |
| Seq. No. | 22151  | Seq. ID | OJ990515_21.9922.C2 |
| Gene No. | 46159  | Strand  | -                   |
| Start    | 16852  | End     | 17355               |
| Name     | OJ990515_21.9922.C2.o6.tw  | Method  | TBLASTX:Wheat       |
| Start    | 11787  | End     | 12244               |
| GI       | none   | Score   | 150                 |
| Exons    | 11787..12023, 11789..12019, 12068..12244   |         |                     |
|          |  |         |                     |
| Seq. No. | 22151  | Seq. ID | OJ990515_21.9922.C2 |

Gene No. 46159  
 Start 16852  
 Name OJ990515\_21.9922.C2.o7.tw  
 Start 12821  
 GI none  
 Exons 12821..13222, 12954..13223

Strand -  
 End 17355  
 Method TBLASTX:Wheat  
 End 13223  
 Score 115

Seq. No. 22151  
 Gene No. 46159  
 Start 16852  
 Name OJ990515\_21.9922.C2.o3.gs  
 Start 16852  
 GI none  
 Exons 16852..17355

Seq. ID OJ990515\_21.9922.C2  
 Strand -  
 End 17355  
 Method GENSCAN  
 End 17355  
 Score .89

Seq. No. 22152  
 Gene No. 46160  
 Start 6992  
 Name OJ990515\_21.9922.C3.o2.gs  
 Start 6992  
 GI none  
 Exons 6992..7687

Seq. ID OJ990515\_21.9922.C3  
 Strand +  
 End 7687  
 Method GENSCAN  
 End 7687  
 Score .49

Seq. No. 22152  
 Gene No. 46161  
 Start 8713  
 Name OJ990515\_21.9922.C3.o1.gp  
 Start 8584  
 GI LIB3474-008-P1-K1-H11  
 Exons 8584..9065

Seq. ID OJ990515\_21.9922.C3  
 Strand +  
 End 9346  
 Method AAT/GAP  
 End 9065  
 Score 916

GI Descrip. '2224810/emb|CAB09698| 1.0e-13 (Z97022) cysteine proteinase [Hordeum vulgare]'

Seq. No. 22152  
 Gene No. 46161  
 Start 8713  
 Name OJ990515\_21.9922.C3.o3.gs  
 Start 8713  
 GI none  
 Exons 8713..9181

Seq. ID OJ990515\_21.9922.C3  
 Strand +  
 End 9346  
 Method GENSCAN  
 End 9181  
 Score .87

Seq. No. 22152  
 Gene No. 46161  
 Start 8713  
 Name OJ990515\_21.9922.C3.o1.np  
 Start 8719  
 GI 5823018  
 Exons 8719..8790, 8818..9215, 9317..9346

Seq. ID OJ990515\_21.9922.C3  
 Strand +  
 End 9346  
 Method AAT/NAP  
 End 9346  
 Score 148

GI Descrip. (AF089848) senescence-specific cysteine protease [Brassica napus]

Seq. No. 22152  
 Gene No. 46161  
 Start 8713  
 Name OJ990515\_21.9922.C3.o1.tc  
 Start 8845  
 GI none

Seq. ID OJ990515\_21.9922.C3  
 Strand +  
 End 9346  
 Method TBLASTX:Cress  
 End 9183  
 Score 134

Exons 8845..9045, 9079..9183

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22152  | Seq. ID | OJ990515_21.9922.C3 |
| Gene No. | 46161  | Strand  | +                   |
| Start    | 8713   | End     | 9346                |
| Name     | OJ990515_21.9922.C3.o1.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 8851   | End     | 9171                |
| GI       | none   | Score   | 150                 |
| Exons    | 8851..8979, 8859..8978, 8968..9033, 9115..9171 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22153  | Seq. ID | OJ990515_21.9922.C4 |
| Gene No.    | 46162  | Strand  | +                   |
| Start       | 1  | End     | 353                 |
| Name        | OJ990515_21.9922.C4.o1.np                      | Method  | AAT/NAP             |
| Start       | 1  | End     | 277                 |
| GI          | 535454   | Score   | 252                 |
| Exons       | 1..277   |         |                     |
| GI Descrip. | (U13940) cysteine proteinase [Alnus glutinosa] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22153  | Seq. ID | OJ990515_21.9922.C4 |
| Gene No. | 46162  | Strand  | +                   |
| Start    | 1  | End     | 353                 |
| Name     | OJ990515_21.9922.C4.o1.tm                          | Method  | TBLASTX:Maize       |
| Start    | 1  | End     | 274                 |
| GI       | none   | Score   | 67                  |
| Exons    | 1..63, 3..62, 85..195, 85..195, 213..269, 224..274 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22153  | Seq. ID | OJ990515_21.9922.C4 |
| Gene No. | 46162  | Strand  | +                   |
| Start    | 1  | End     | 353                 |
| Name     | OJ990515_21.9922.C4.o1.tc                                    | Method  | TBLASTX:Cress       |
| Start    | 1  | End     | 353                 |
| GI       | none   | Score   | 62                  |
| Exons    | 1..63, 3..62, 84..188, 85..192, 196..270, 200..271, 297..353 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22153                                       | Seq. ID | OJ990515_21.9922.C4 |
| Gene No. | 46162                                       | Strand  | +                   |
| Start    | 1   | End     | 353                 |
| Name     | OJ990515_21.9922.C4.o1.ts                   | Method  | TBLASTX:Soybean     |
| Start    | 1   | End     | 283                 |
| GI       | none  | Score   | 52                  |
| Exons    | 1..69, 64..192, 96..188, 196..282, 200..283 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22153                     | Seq. ID | OJ990515_21.9922.C4 |
| Gene No. | 46162                     | Strand  | +                   |
| Start    | 1                         | End     | 353                 |
| Name     | OJ990515_21.9922.C4.o1.gs | Method  | GENSCAN             |
| Start    | 70                        | End     | 122                 |
| GI       | none                      | Score   | .48                 |
| Exons    | 70..122                   |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22154                     | Seq. ID | OJ990515_21.9922.C5 |
| Gene No. | 46163                     | Strand  | -                   |
| Start    | 59                        | End     | 126                 |
| Name     | OJ990515_21.9922.C5.o1.gs | Method  | GENSCAN             |
| Start    | 59                        | End     | 126                 |
| GI       | none                      | Score   | .89                 |

Exons 59..126

Seq. No. 22155 Seq. ID OJ990515\_21.9922.C7  
Gene No. 46164 Strand -  
Start 38 End 293  
Name OJ990515\_21.9922.C7.ol.gp Method AAT/GAP  
Start 38 End 293  
GI 12131\_1.R1084 Score 71  
Exons 38..58, 242..293  
GI Descrip. '2505868/emb|CAA72906| 2.0e-21 (Y12227) hypothetical protein  
[Arabidopsis thaliana]'

Seq. No. 22156 Seq. ID OJ990515\_21.9922.C8  
Gene No. 46165 Strand +  
Start 1 End 3487  
Name OJ990515\_21.9922.C8.ol.np Method AAT/NAP  
Start 1 End 3174  
GI 2065019 Score 190  
Exons 1..116, 615..758, 1667..1718, 2321..2394, 3066..3174  
GI Descrip. (Y09823) hypothetical protein [Arabidopsis thaliana]

Seq. No. 22156 Seq. ID OJ990515\_21.9922.C8  
Gene No. 46165 Strand +  
Start 1 End 3487  
Name OJ990515\_21.9922.C8.ol.tm Method TBLASTX:Maize  
Start 13 End 3290  
GI none Score 69  
Exons 13..84, 604..798, 607..765, 649..801, 1668..1718, 1668..1718,  
1668..1721, 2306..2392, 2306..2401, 2320..2412, 2320..2403,  
3063..3260, 3064..3225, 3254..3286, 3255..3290

Seq. No. 22156 Seq. ID OJ990515\_21.9922.C8  
Gene No. 46165 Strand +  
Start 1 End 3487  
Name OJ990515\_21.9922.C8.ol.gp Method AAT/GAP  
Start 611 End 3487  
GI 2289\_1.R1084 Score 1018  
Exons 611..758, 1667..1718, 2321..2394, 3066..3155, 3275..3487  
GI Descrip. '4521193/dbj|AB013450.1|AB013450 1.0e-99 Oryza sativa DNA,  
similar sequence to Pib gene'

Seq. No. 22156 Seq. ID OJ990515\_21.9922.C8  
Gene No. 46165 Strand +  
Start 1 End 3487  
Name OJ990515\_21.9922.C8.ol.gs Method GENSCAN  
Start 691 End 1790  
GI none Score .63  
Exons 691..758, 1667..1790

Seq. No. 22157 Seq. ID OJ990515\_21.9922.C9  
Gene No. 46166 Strand -  
Start 786 End 4372  
Name OJ990515\_21.9922.C9.ol.gp Method AAT/GAP  
Start 786 End 1195  
GI LIB3432-012-P1-K1-B6 Score 776  
Exons 786..1195  
GI Descrip. '2130082/pir||A57676 1.0e-13 protein kinase Xa21 (EC 2.7.1.-) -

rice >gi\_1122443 (U37133) receptor kinase-like protein [Oryza sativa] >gi\_2586085 (U72723) receptor kinase-like protein [Oryza longistaminata] >gi\_1586408\_prf\_\_2203451A receptor kinase-like protein [Oryza sativa]'

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22157  | Seq. ID | OJ990515_21.9922.C9 |
| Gene No.    | 46166  | Strand  | -                   |
| Start       | 786  | End     | 4372                |
| Name        | OJ990515_21.9922.C9.ol.np                                    | Method  | AAT/NAP             |
| Start       | 813  | End     | 4372                |
| GI          | 2586083  | Score   | 1758                |
| Exons       | 813..1204, 1371..3478, 3908..4372                            |         |                     |
| GI Descrip. | (U72725) receptor kinase-like protein [Oryza longistaminata] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22157  | Seq. ID | OJ990515_21.9922.C9 |
| Gene No. | 46167  | Strand  | -                   |
| Start    | 5451   | End     | 5698                |
| Name     | OJ990515_21.9922.C9.ol.tc  | Method  | TBLASTX:Cress       |
| Start    | 864  | End     | 4207                |
| GI       | none   | Score   | 67                  |
| Exons    | 864..947, 1098..1205, 1450..1608, 1460..1597, 2161..2271, 2170..2445, 2215..2442, 2215..2442, 2215..2442, 2218..2442, 2218..2457, 2221..2442, 2221..2463, 2221..2490, 2221..2403, 2221..2442, 2221..2445, 2224..2445, 2231..2443, 2445..2549, 2468..2548, 2468..2548, 2492..2548, 2492..2554, 2492..2548, 2552..2740, 2558..2740, 2577..2825, 2804..2926, 2912..2995, 2930..2989, 3041..3223, 3092..3223, 3095..3199, 3200..3307, 3227..3523, 3230..4069, 3233..3514, 3233..3514, 3239..3529, 3242..3529, 3245..3523, 3452..4141, 3521..3865, 3527..4153, 3527..4150, 3527..4006, 3528..3704, 3599..4150, 3602..4156, 3657..3770, 3672..3974, 3692..4156, 3878..4141, 4010..4120, 4172..4207 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22157  | Seq. ID | OJ990515_21.9922.C9 |
| Gene No. | 46167  | Strand  | -                   |
| Start    | 5451   | End     | 5698                |
| Name     | OJ990515_21.9922.C9.o3.tm                    | Method  | TBLASTX:Maize       |
| Start    | 870  | End     | 1232                |
| GI       | none   | Score   | 99                  |
| Exons    | 870..950, 1023..1232, 1032..1205, 1048..1230 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22157  | Seq. ID | OJ990515_21.9922.C9 |
| Gene No. | 46167  | Strand  | -                   |
| Start    | 5451   | End     | 5698                |
| Name     | OJ990515_21.9922.C9.ol.ts  | Method  | TBLASTX:Soybean     |
| Start    | 1068   | End     | 4153                |
| GI       | none   | Score   | 76                  |
| Exons    | 1068..1205, 1450..1620, 1454..1618, 1654..1722, 1735..1800, 2161..2442, 2206..2442, 2215..2445, 2215..2442, 2215..2466, 2221..2445, 2221..2442, 2221..2442, 2263..2442, 2468..2548, 2474..2548, 2555..2746, 2558..2746, 2558..2746, 2558..2623, 2576..2743, 2580..2774, 2585..2746, 2709..2828, 2801..2998, 2801..2920, 3041..3103, 3095..3496, 3095..3217, 3095..3190, 3095..3319, 3188..3538, 3206..3523, 3230..3361, 3230..3520, 3233..3496, 3243..3410, 3314..3529, 3410..3529, 3476..4141, 3518..4153, 3524..3724, 3527..4117, 3527..4054, 3527..3970, 3528..3755, 3599..4006, 3660..3941, 3879..4052, 3881..4150 |         |                     |

Seq. No. 22157  
 Gene No. 46167  
 Start 5451  
 Name OJ990515\_21.9922.C9.o1.tm  
 Start 1378  
 GI none  
 Exons 1378..1827, 1385..1822

Seq. ID OJ990515\_21.9922.C9  
 Strand -  
 End 5698  
 Method TBLASTX:Maize  
 End 1827  
 Score 257

Seq. No. 22157  
 Gene No. 46167  
 Start 5451  
 Name OJ990515\_21.9922.C9.o2.tc  
 Start 1624  
 GI none  
 Exons 1624..1962, 1631..1957

Seq. ID OJ990515\_21.9922.C9  
 Strand -  
 End 5698  
 Method TBLASTX:Cress  
 End 1962  
 Score 140

Seq. No. 22157  
 Gene No. 46167  
 Start 5451  
 Name OJ990515\_21.9922.C9.o2.tm  
 Start 2215  
 GI none  
 Exons 2215..2445, 2218..2457, 2218..2331, 2221..2445, 2221..2418,

Seq. ID OJ990515\_21.9922.C9  
 Strand -  
 End 5698  
 Method TBLASTX:Maize  
 End 4153  
 Score 76

2275..2466, 2471..2548, 2558..2740, 2576..2740, 2652..2828,  
 2727..2915, 2798..2920, 2798..2902, 2798..2905, 2801..2926,  
 2801..2923, 3089..3190, 3230..3514, 3233..3997, 3243..3482,  
 3525..3626, 3528..3695, 3590..4069, 3600..3971, 3659..4153,  
 3666..3926, 3797..4063, 3887..4153, 3944..4141

Seq. No. 22157  
 Gene No. 46167  
 Start 5451  
 Name OJ990515\_21.9922.C9.o1.tw  
 Start 2558  
 GI none  
 Exons 2558..2647, 2817..3002, 2819..3001, 2838..3002, 3002..3088,  
 3007..3096, 3009..3092, 3116..3307, 3374..3466, 3833..3937

Seq. ID OJ990515\_21.9922.C9  
 Strand -  
 End 5698  
 Method TBLASTX:Wheat  
 End 3937  
 Score 140

Seq. No. 22157  
 Gene No. 46167  
 Start 5451  
 Name OJ990515\_21.9922.C9.o2.gs  
 Start 5451  
 GI none  
 Exons 5451..5543, 5693..5698

Seq. ID OJ990515\_21.9922.C9  
 Strand -  
 End 5698  
 Method GENSCAN  
 End 5698  
 Score .99

Seq. No. 22158  
 Gene No. 46168  
 Start 398  
 Name OJ990515\_21.9922.C10.o1.gs  
 Start 398  
 GI none  
 Exons 398..612

Seq. ID OJ990515\_21.9922.C10  
 Strand +  
 End 612  
 Method GENSCAN  
 End 612  
 Score .82

Seq. No. 22158  
 Gene No. 46169

Seq. ID OJ990515\_21.9922.C10  
 Strand -



|       |                                    |        |         |
|-------|------------------------------------|--------|---------|
| Start | 1236                               | End    | 2734    |
| Name  | OJ990515_21.9922.C10.o2.gs         | Method | GENSCAN |
| Start | 1236                               | End    | 2734    |
| GI    | none                               | Score  | .6      |
| Exons | 1236..1305, 2024..2142, 2726..2734 |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22159  | Seq. ID | OJ990515_21.9922.C11 |
| Gene No. | 46170  | Strand  | +                    |
| Start    | 359  | End     | 7024                 |
| Name     | OJ990515_21.9922.C11.o1.gs   | Method  | GENSCAN              |
| Start    | 359  | End     | 7024                 |
| GI       | none   | Score   | .83                  |
| Exons    | 359..394, 626..648, 1183..1324, 2241..2375, 3464..3523, 5532..5820, 6759..6806, 6945..7024 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22159                      | Seq. ID | OJ990515_21.9922.C11 |
| Gene No. | 46171                      | Strand  | +                    |
| Start    | 8307                       | End     | 8786                 |
| Name     | OJ990515_21.9922.C11.o2.gs | Method  | GENSCAN              |
| Start    | 8307                       | End     | 8786                 |
| GI       | none                       | Score   | .9                   |
| Exons    | 8307..8389, 8738..8786     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22159  | Seq. ID | OJ990515_21.9922.C11 |
| Gene No.    | 46172  | Strand  | +                    |
| Start       | 9585   | End     | 10826                |
| Name        | OJ990515_21.9922.C11.o1.np                     | Method  | AAT/NAP              |
| Start       | 9585   | End     | 10826                |
| GI          | 6721543  | Score   | 100                  |
| Exons       | 9585..9711, 10766..10826                       |         |                      |
| GI Descrip. | (AP001073) hypothetical protein [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22159   | Seq. ID | OJ990515_21.9922.C11 |
| Gene No.    | 46173   | Strand  | -                    |
| Start       | 10224   | End     | 12589                |
| Name        | OJ990515_21.9922.C11.o1.gp  | Method  | AAT/GAP              |
| Start       | 9946  | End     | 10399                |
| GI          | LIB3431-045-P1-N1-A10   | Score   | 888                  |
| Exons       | 9946..10399   |         |                      |
| GI Descrip. | '5441876/dbj AP000367.1 AP000367 0.0e+00 Oryza sativa genomic DNA, chromosome 2, clone:P0437H03 (contig b)' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22159  | Seq. ID | OJ990515_21.9922.C11 |
| Gene No. | 46173  | Strand  | -                    |
| Start    | 10224  | End     | 12589                |
| Name     | OJ990515_21.9922.C11.o3.gs   | Method  | GENSCAN              |
| Start    | 10224  | End     | 11864                |
| GI       | none   | Score   | .6                   |
| Exons    | 10224..10384, 10520..10789, 10853..11035, 11183..11360, 11453..11711, 11788..11864 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22159                      | Seq. ID | OJ990515_21.9922.C11 |
| Gene No. | 46173                      | Strand  | -                    |
| Start    | 10224                      | End     | 12589                |
| Name     | OJ990515_21.9922.C11.o2.np | Method  | AAT/NAP              |
| Start    | 10503                      | End     | 12589                |
| GI       | 5441880                    | Score   | 1217                 |

Exons 10503..10737, 10853..10984, 11075..11098, 11135..11208,  
11453..11711, 11788..11896, 12563..12589  
GI Descrip. (AP000367) EST.C28952(C62945) corresponds to a region of the  
predicted gene.; Similar to maize transposon MuDR mudrA protein.  
(AC003981) [Oryza sativa]

Seq. No. 22159 Seq. ID OJ990515\_21.9922.C11  
Gene No. 46173 Strand -  
Start 10224 End 12589  
Name OJ990515\_21.9922.C11.o3.np Method AAT/NAP  
Start 11278 End 12523  
GI 6721543 Score 118  
Exons 11278..11320, 12391..12523  
GI Descrip. (AP001073) hypothetical protein [Oryza sativa]

Seq. No. 22159 Seq. ID OJ990515\_21.9922.C11  
Gene No. 46173 Strand -  
Start 10224 End 12589  
Name OJ990515\_21.9922.C11.o2.gp Method AAT/GAP  
Start 11461 End 11893  
GI LIB3475-007-P1-K1-G8 Score 641  
Exons 11461..11711, 11788..11893  
GI Descrip. '5441880/dbj|BAA82378.1| 5.0e-75 (AP000367) EST C28952(C62945)  
corresponds to a region of the predicted gene.; Similar to maize  
transposon MuDR mudrA protein. (AC003981) [Oryza sativa]'

Seq. No. 22159 Seq. ID OJ990515\_21.9922.C11  
Gene No. 46173 Strand -  
Start 10224 End 12589  
Name OJ990515\_21.9922.C11.o3.gp Method AAT/GAP  
Start 12357 End 12509  
GI 7406\_1.R1084 Score 213  
Exons 12357..12509  
GI Descrip. '1122315/emb|CAA63901| 7.0e-10 (X94191) heat shock protein 17.0  
[Pennisetum glaucum]'

Seq. No. 22160 Seq. ID OJ990515\_21.9922.C12  
Gene No. 46174 Strand +  
Start 221 End 4350  
Name OJ990515\_21.9922.C12.o1.np Method AAT/NAP  
Start 221 End 4350  
GI 4507961 Score 36  
Exons 221..367, 4057..4350  
GI Descrip. zinc finger protein homologous to Zfp-36 in mouse  
gi|136471|sp|P26651|TTP HUMAN TRISTETRAPROLINE (TTP) (TIS11A)  
(TIS11) (ZFP-36) (GROWTH FACTOR-INDUCIBLE NUCLEAR PROTEIN  
NUP475) gi|423132|pir|S34427 tristetraproline protein - human  
gi|183443 (M92843) zinc finger transcriptional regulator [Homo  
sapiens] gi|183445 (M92844) zinc finger transcriptional  
regulator [Homo sa

Seq. No. 22160 Seq. ID OJ990515\_21.9922.C12  
Gene No. 46175 Strand -  
Start 458 End 4275  
Name OJ990515\_21.9922.C12.o1.gs Method GENSCAN  
Start 458 End 4275  
GI none Score .4

Exons 458..897, 3042..3245, 3475..3537, 4152..4275

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22161                      | Seq. ID | OJ990515_21.9922.C13 |
| Gene No. | 46176                      | Strand  | +                    |
| Start    | 1292                       | End     | 1359                 |
| Name     | OJ990515_21.9922.C13.ol.gs | Method  | GENSCAN              |
| Start    | 1292                       | End     | 1359                 |
| GI       | none                       | Score   | .63                  |
| Exons    | 1292..1359                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22162                      | Seq. ID | OJ990515_21.9922.C14 |
| Gene No. | 46177                      | Strand  | -                    |
| Start    | 17                         | End     | 175                  |
| Name     | OJ990515_21.9922.C14.ol.gs | Method  | GENSCAN              |
| Start    | 17                         | End     | 175                  |
| GI       | none                       | Score   | .99                  |
| Exons    | 17..175                    |         |                      |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22163                     | Seq. ID | OJ990515_20.9924.C2 |
| Gene No. | 46178                     | Strand  | +                   |
| Start    | 167                       | End     | 342                 |
| Name     | OJ990515_20.9924.C2.ol.gs | Method  | GENSCAN             |
| Start    | 167                       | End     | 342                 |
| GI       | none                      | Score   | .51                 |
| Exons    | 167..342                  |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22164   | Seq. ID | OJ990515_20.9924.C4 |
| Gene No.    | 46179   | Strand  | -                   |
| Start       | 1   | End     | 14156               |
| Name        | OJ990515_20.9924.C4.ol.np                         | Method  | AAT/NAP             |
| Start       | 1   | End     | 4418                |
| GI          | 2286113   | Score   | 676                 |
| Exons       | 1..84, 156..255, 833..903, 1548..1626, 4234..4418 |         |                     |
| GI Descrip. | (U78892) MADS box protein [Oryza sativa]          |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22164   | Seq. ID | OJ990515_20.9924.C4 |
| Gene No.    | 46179   | Strand  | -                   |
| Start       | 1   | End     | 14156               |
| Name        | OJ990515_20.9924.C4.o2.np                         | Method  | AAT/NAP             |
| Start       | 1   | End     | 14156               |
| GI          | 6642682   | Score   | 283                 |
| Exons       | 1..66, 11222..11327, 13972..14156                 |         |                     |
| GI Descrip. | (AC015450) unknown protein [Arabidopsis thaliana] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22164   | Seq. ID | OJ990515_20.9924.C4 |
| Gene No.    | 46179   | Strand  | -                   |
| Start       | 1   | End     | 14156               |
| Name        | OJ990515_20.9924.C4.ol.gp   | Method  | AAT/GAP             |
| Start       | 43  | End     | 4526                |
| GI          | 368_2.R1084   | Score   | 1063                |
| Exons       | 43..84, 156..255, 833..903, 1548..1626, 4234..4526                  |         |                     |
| GI Descrip. | '3928085 8.0e-17 (AC005770) unknown protein [Arabidopsis thaliana]' |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22164 | Seq. ID | OJ990515_20.9924.C4 |
| Gene No. | 46179 | Strand  | -                   |
| Start    | 1     | End     | 14156               |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990515_20.9924.C4.o1.tm  | Method | TBLASTX:Maize |
| Start | 43   | End    | 4397          |
| GI    | none   | Score  | 71            |
| Exons | 43..84, 43..87, 156..257, 158..256, 830..904, 832..906, 1539..1628, 1549..1629, 4228..4365, 4236..4397 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22164  | Seq. ID | OJ990515_20.9924.C4 |
| Gene No. | 46179  | Strand  | -                   |
| Start    | 1  | End     | 14156               |
| Name     | OJ990515_20.9924.C4.o1.gs  | Method  | GENSCAN             |
| Start    | 156  | End     | 4418                |
| GI       | none   | Score   | .79                 |
| Exons    | 156..255, 833..903, 1548..1626, 3419..3448, 4029..4124, 4234..4418 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22164                                      | Seq. ID | OJ990515_20.9924.C4 |
| Gene No. | 46179                                      | Strand  | -                   |
| Start    | 1  | End     | 14156               |
| Name     | OJ990515_20.9924.C4.o1.ts                  | Method  | TBLASTX:Soybean     |
| Start    | 156  | End     | 4397                |
| GI       | none                                       | Score   | 175                 |
| Exons    | 156..257, 832..897, 4234..4365, 4239..4397 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22164  | Seq. ID | OJ990515_20.9924.C4 |
| Gene No. | 46179  | Strand  | -                   |
| Start    | 1  | End     | 14156               |
| Name     | OJ990515_20.9924.C4.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 179  | End     | 4397                |
| GI       | none   | Score   | 68                  |
| Exons    | 179..256, 180..257, 830..892, 832..900, 876..902, 1548..1634, 1549..1635, 4228..4365, 4236..4397 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22164                     | Seq. ID | OJ990515_20.9924.C4 |
| Gene No. | 46179                     | Strand  | -                   |
| Start    | 1                         | End     | 14156               |
| Name     | OJ990515_20.9924.C4.o1.tc | Method  | TBLASTX:Cress       |
| Start    | 4227                      | End     | 4397                |
| GI       | none                      | Score   | 165                 |
| Exons    | 4227..4397, 4243..4368    |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22164                                   | Seq. ID | OJ990515_20.9924.C4 |
| Gene No. | 46179                                   | Strand  | -                   |
| Start    | 1                                       | End     | 14156               |
| Name     | OJ990515_20.9924.C4.o3.gs               | Method  | GENSCAN             |
| Start    | 9678                                    | End     | 10553               |
| GI       | none                                    | Score   | .86                 |
| Exons    | 9678..10175, 10217..10309, 10323..10553 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22164  | Seq. ID | OJ990515_20.9924.C4 |
| Gene No. | 46179  | Strand  | -                   |
| Start    | 1  | End     | 14156               |
| Name     | OJ990515_20.9924.C4.o2.ts                              | Method  | TBLASTX:Soybean     |
| Start    | 11243  | End     | 14114               |
| GI       | none   | Score   | 77                  |
| Exons    | 11243..11329, 11244..11330, 13971..14114, 13972..14049 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22164 | Seq. ID | OJ990515_20.9924.C4 |
|----------|-------|---------|---------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46179                                    | Strand | -             |
| Start    | 1  | End    | 14156         |
| Name     | OJ990515_20.9924.C4.o2.tm                | Method | TBLASTX:Maize |
| Start    | 11261                                    | End    | 14112         |
| GI       | none                                     | Score  | 83            |
| Exons    | 11261..11329, 13971..14111, 13975..14112 |        |               |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22165                     | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46180                     | Strand  | +                   |
| Start    | 1562                      | End     | 1714                |
| Name     | OJ990515_20.9924.C5.o1.gs | Method  | GENSCAN             |
| Start    | 1562                      | End     | 1714                |
| GI       | none                      | Score   | 1                   |
| Exons    | 1562..1714                |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46181  | Strand  | +                   |
| Start    | 13190  | End     | 14768               |
| Name     | OJ990515_20.9924.C5.o4.gs                              | Method  | GENSCAN             |
| Start    | 13190  | End     | 14768               |
| GI       | none   | Score   | .5                  |
| Exons    | 13190..13311, 13687..13838, 14345..14493, 14607..14768 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46182  | Strand  | +                   |
| Start    | 15439  | End     | 24283               |
| Name     | OJ990515_20.9924.C5.o5.gs  | Method  | GENSCAN             |
| Start    | 15439  | End     | 24283               |
| GI       | none   | Score   | .7                  |
| Exons    | 15439..16042, 16548..16574, 16821..16927, 21062..21153, 23887..24091, 24269..24283 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46183  | Strand  | +                   |
| Start       | 34067  | End     | 35270               |
| Name        | OJ990515_20.9924.C5.o7.np                      | Method  | AAT/NAP             |
| Start       | 32873  | End     | 34046               |
| GI          | 6907088  | Score   | 339                 |
| Exons       | 32873..33009, 33187..33403, 33632..34046       |         |                     |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22165                      | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46183                      | Strand  | +                   |
| Start    | 34067                      | End     | 35270               |
| Name     | OJ990515_20.9924.C5.o8.gs  | Method  | GENSCAN             |
| Start    | 34067                      | End     | 35270               |
| GI       | none                       | Score   | .68                 |
| Exons    | 34067..34439, 34645..35270 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22165   | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46184   | Strand  | +                   |
| Start    | 47758   | End     | 53980               |
| Name     | OJ990515_20.9924.C5.o12.gs  | Method  | GENSCAN             |
| Start    | 47758   | End     | 53980               |
| GI       | none  | Score   | .71                 |
| Exons    | 47758..47950, 49634..49914, 50798..50895, 50973..51039, 51123..51242, 51354..51446, 51598..51795, 52412..52617, |         |                     |

52717..52842, 53362..53980

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46184  | Strand  | +                   |
| Start       | 47758  | End     | 53980               |
| Name        | OJ990515_20.9924.C5.o15.np   | Method  | AAT/NAP             |
| Start       | 49690  | End     | 53974               |
| GI          | 4455232  | Score   | 1653                |
| Exons       | 49690..49728, 49774..49908, 51078..51242, 51354..51446, 51598..51722, 52084..52216, 52412..52617, 52717..52842, 53362..53974 |         |                     |
| GI Descrip. | (AL035523) putative protein [Arabidopsis thaliana]   |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46185  | Strand  | -                   |
| Start    | 2080   | End     | 4962                |
| Name     | OJ990515_20.9924.C5.o2.gs  | Method  | GENSCAN             |
| Start    | 2080   | End     | 4962                |
| GI       | none   | Score   | .62                 |
| Exons    | 2080..2130, 3174..3210, 3708..3766, 3901..4230, 4344..4470, 4706..4962 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46185  | Strand  | -                   |
| Start       | 2080   | End     | 4962                |
| Name        | OJ990515_20.9924.C5.o1.np                              | Method  | AAT/NAP             |
| Start       | 2606   | End     | 4953                |
| GI          | 4455233  | Score   | 566                 |
| Exons       | 2606..3042, 3833..4230, 4344..4470, 4706..4953         |         |                     |
| GI Descrip. | (AL035523) hypothetical protein [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46186  | Strand  | -                   |
| Start    | 6184   | End     | 14796               |
| Name     | OJ990515_20.9924.C5.o3.gs  | Method  | GENSCAN             |
| Start    | 6184   | End     | 11788               |
| GI       | none   | Score   | .75                 |
| Exons    | 6184..6333, 6567..6769, 6831..6877, 7171..7232, 7423..7512, 7529..7561, 7596..7765, 7862..7916, 8024..8109, 8625..8775, 9505..9548, 9853..9895, 10049..10156, 10251..10379, 10537..10578, 10651..10720, 11307..11430, 11546..11638, 11722..11788 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46186  | Strand  | -                   |
| Start       | 6184   | End     | 14796               |
| Name        | OJ990515_20.9924.C5.o2.np  | Method  | AAT/NAP             |
| Start       | 7182   | End     | 14796               |
| GI          | 2760319  | Score   | 1092                |
| Exons       | 7182..7232, 7351..7500, 7644..7765, 7985..8109, 8625..8775, 9044..9120, 9411..9628, 10041..10156, 10251..10379, 10537..10578, 10651..10720, 11307..11430, 11546..11638, 11722..11790, 11883..11979, 14743..14796 |         |                     |
| GI Descrip. | (AC002130) F1N21.3 [Arabidopsis thaliana]  |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22165 | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46187 | Strand  | -                   |

|             |   |        |         |
|-------------|---|--------|---------|
| Start       | 16415   | End    | 17129   |
| Name        | OJ990515_20.9924.C5.o3.np   | Method | AAT/NAP |
| Start       | 16415   | End    | 17129   |
| GI          | 6069646   | Score  | 310     |
| Exons       | 16415..17129  |        |         |
| GI Descrip. | (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi 6907112 dbj BAA90639.1  (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa] |        |         |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22165   | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46188   | Strand  | -                   |
| Start       | 17743   | End     | 19247               |
| Name        | OJ990515_20.9924.C5.o4.np   | Method  | AAT/NAP             |
| Start       | 17743   | End     | 19247               |
| GI          | 5803254   | Score   | 897                 |
| Exons       | 17743..18117, 18205..18360, 18453..18935, 18963..19247  |         |                     |
| GI Descrip. | (AP000399) ESTs C97429(C60159), D22427(C11106), AU078031(E31854), D15683(C1084) correspond to a region of the predicted gene; hypothetical protein [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46189  | Strand  | -                   |
| Start       | 29320  | End     | 31014               |
| Name        | OJ990515_20.9924.C5.o5.np                      | Method  | AAT/NAP             |
| Start       | 29320  | End     | 31014               |
| GI          | 6907086  | Score   | 1103                |
| Exons       | 29320..29727, 29954..30181, 30242..31014       |         |                     |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22165                      | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46189                      | Strand  | -                   |
| Start    | 29320                      | End     | 31014               |
| Name     | OJ990515_20.9924.C5.o7.gs  | Method  | GENSCAN             |
| Start    | 30267                      | End     | 30831               |
| GI       | none                       | Score   | .94                 |
| Exons    | 30267..30694, 30720..30831 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22165   | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46190   | Strand  | -                   |
| Start       | 31721   | End     | 35029               |
| Name        | OJ990515_20.9924.C5.o6.np                       | Method  | AAT/NAP             |
| Start       | 31721   | End     | 35029               |
| GI          | 4680186   | Score   | 166                 |
| Exons       | 31721..32145, 34778..35029                      |         |                     |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46191  | Strand  | -                   |
| Start       | 36374  | End     | 39801               |
| Name        | OJ990515_20.9924.C5.o8.np                      | Method  | AAT/NAP             |
| Start       | 36369  | End     | 37036               |
| GI          | 5091506  | Score   | 684                 |
| Exons       | 36369..37036                                   |         |                     |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46191  | Strand  | -                   |
| Start    | 36374  | End     | 39801               |
| Name     | OJ990515_20.9924.C5.o9.gs  | Method  | GENSCAN             |
| Start    | 36374  | End     | 39801               |
| GI       | none   | Score   | .62                 |
| Exons    | 36374..36769, 36817..36908, 38031..38250, 38581..38691, 39211..39402, 39676..39801 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22165   | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46191   | Strand  | -                   |
| Start       | 36374   | End     | 39801               |
| Name        | OJ990515_20.9924.C5.o10.np  | Method  | AAT/NAP             |
| Start       | 37876   | End     | 39369               |
| GI          | 5803254   | Score   | 790                 |
| Exons       | 37876..38250, 38335..38481, 38581..39369  |         |                     |
| GI Descrip. | (AP000399) ESTs C97429(C60159), D22427(C11106), AU078031(E31854), D15683(C1084) correspond to a region of the predicted gene; hypothetical protein [Oryza sativa] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46192  | Strand  | -                   |
| Start    | 40806  | End     | 41757               |
| Name     | OJ990515_20.9924.C5.o10.gs                             | Method  | GENSCAN             |
| Start    | 40806  | End     | 41757               |
| GI       | none   | Score   | .73                 |
| Exons    | 40806..40950, 40983..41133, 41154..41411, 41727..41757 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46193  | Strand  | -                   |
| Start    | 43037  | End     | 46832               |
| Name     | OJ990515_20.9924.C5.o11.gs   | Method  | GENSCAN             |
| Start    | 43037  | End     | 46832               |
| GI       | none   | Score   | .7                  |
| Exons    | 43037..43420, 43505..43657, 43891..43983, 44377..44513, 45934..46109, 46714..46832 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22165   | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46193   | Strand  | -                   |
| Start       | 43037   | End     | 46832               |
| Name        | OJ990515_20.9924.C5.o14.np  | Method  | AAT/NAP             |
| Start       | 43046   | End     | 44535               |
| GI          | 5803254   | Score   | 814                 |
| Exons       | 43046..43420, 43505..43672, 43768..44535  |         |                     |
| GI Descrip. | (AP000399) ESTs C97429(C60159), D22427(C11106), AU078031(E31854), D15683(C1084) correspond to a region of the predicted gene; hypothetical protein [Oryza sativa] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194  | Strand  | -                   |
| Start    | 54581  | End     | 58224               |
| Name     | OJ990515_20.9924.C5.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 2627   | End     | 2995                |
| GI       | none   | Score   | 60                  |
| Exons    | 2627..2698, 2627..2680, 2668..2739, 2674..2745, 2738..2890, 2738..2896, 2893..2988, 2902..2994, 2915..2995 |         |                     |



|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194  | Strand  | -                   |
| Start    | 54581  | End     | 58224               |
| Name     | OJ990515_20.9924.C5.o6.tm  | Method  | TBLASTX:Maize       |
| Start    | 4345   | End     | 4959                |
| GI       | none   | Score   | 50                  |
| Exons    | 4345..4401, 4349..4384, 4384..4470, 4386..4469, 4708..4779, 4709..4771, 4795..4959 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194  | Strand  | -                   |
| Start    | 54581  | End     | 58224               |
| Name     | OJ990515_20.9924.C5.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 11726  | End     | 14817               |
| GI       | none   | Score   | 68                  |
| Exons    | 11726..11791, 11727..11792, 11884..11979, 11885..11980, 14738..14809, 14755..14817 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22165                      | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194                      | Strand  | -                   |
| Start    | 54581                      | End     | 58224               |
| Name     | OJ990515_20.9924.C5.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 16445                      | End     | 16834               |
| GI       | none                       | Score   | 137                 |
| Exons    | 16445..16645, 16682..16834 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194  | Strand  | -                   |
| Start    | 54581  | End     | 58224               |
| Name     | OJ990515_20.9924.C5.o3.tm                              | Method  | TBLASTX:Maize       |
| Start    | 16448  | End     | 16984               |
| GI       | none   | Score   | 85                  |
| Exons    | 16448..16654, 16655..16879, 16656..16880, 16898..16984 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194  | Strand  | -                   |
| Start    | 54581  | End     | 58224               |
| Name     | OJ990515_20.9924.C5.o5.tm  | Method  | TBLASTX:Maize       |
| Start    | 17749  | End     | 43345               |
| GI       | none   | Score   | 84                  |
| Exons    | 17749..17904, 17752..17829, 17912..18037, 17914..18039, 17959..18039, 37883..37978, 37885..37980, 38050..38199, 38062..38196, 43033..43125, 43052..43141, 43056..43133, 43058..43156, 43059..43160, 43215..43337, 43220..43345, 43232..43345 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22165   | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194   | Strand  | -                   |
| Start    | 54581   | End     | 58224               |
| Name     | OJ990515_20.9924.C5.o2.tm   | Method  | TBLASTX:Maize       |
| Start    | 18044   | End     | 44134               |
| GI       | none  | Score   | 54                  |
| Exons    | 18044..18070, 18199..18360, 18199..18369, 18451..18528, 18476..18541, 18477..18533, 18603..18716, 18610..18828, 18612..18830, 38330..38407, 38332..38412, 38346..38408, 38347..38412, 38416..38517, 38425..38481, 38602..38658, 38604..38669, 38735..38968, 38743..38961, 43350..43373, |         |                     |

43499..43573, 43500..43556, 43601..43657, 43601..43681,  
43768..43950, 43776..43823, 43904..43945, 43954..44127,  
43970..44134

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22165   | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194   | Strand  | -                   |
| Start    | 54581   | End     | 58224               |
| Name     | OJ990515_20.9924.C5.ol.tm   | Method  | TBLASTX:Maize       |
| Start    | 47854   | End     | 58122               |
| GI       | none  | Score   | 101                 |
| Exons    | 47854..47946, 49816..49908, 50743..50850, 50757..50852,<br>50971..50994, 51013..51039, 51120..51242, 51122..51235,<br>51353..51436, 51354..51449, 51597..51659, 51598..51660,<br>51681..51728, 51682..51729, 51918..52004, 51919..52002,<br>52084..52215, 52085..52222, 52407..52607, 52409..52612,<br>52447..52617, 52714..52854, 52715..52843, 53358..53492,<br>53360..53500, 53362..53514, 53363..53947, 53563..53661,<br>53755..53964, 54575..54775, 54626..54733, 54791..54859,<br>54917..55012, 54936..55010, 55016..55255, 55017..55256,<br>55256..55591, 55347..55574, 56233..56361, 56234..56362,<br>56447..56533, 56447..56515, 56449..56532, 56602..56703,<br>56737..56799, 56738..56797, 56852..56962, 56877..56963,<br>57074..57199, 57079..57201, 57834..57932, 57838..57933,<br>58012..58122, 58013..58111 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194  | Strand  | -                   |
| Start    | 54581  | End     | 58224               |
| Name     | OJ990515_20.9924.C5.ol.ts  | Method  | TBLASTX:Soybean     |
| Start    | 47854  | End     | 58098               |
| GI       | none   | Score   | 74                  |
| Exons    | 47854..47946, 49816..49914, 50746..50862, 50754..50861,<br>51013..51039, 51146..51241, 51147..51242, 51158..51238,<br>51353..51445, 51354..51449, 51597..51728, 51598..51729,<br>51918..52007, 51919..51996, 51923..52009, 52077..52217,<br>52081..52218, 52081..52215, 52082..52222, 52085..52216,<br>52409..52615, 52423..52617, 52450..52617, 52714..52854,<br>52715..52855, 53362..53517, 53363..53947, 53563..53661,<br>53767..53964, 54572..54775, 54791..54859, 54917..55015,<br>54924..55016, 55016..55255, 55020..55256, 55256..55591,<br>55347..55574, 56233..56367, 56233..56364, 56234..56398,<br>56447..56533, 56455..56532, 56602..56721, 56710..56802,<br>56737..56799, 56852..56962, 56862..56954, 57088..57174,<br>57807..57932, 57991..58098 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22165  | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194  | Strand  | -                   |
| Start    | 54581  | End     | 58224               |
| Name     | OJ990515_20.9924.C5.o2.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 53803  | End     | 54745               |
| GI       | none   | Score   | 191                 |
| Exons    | 53803..53985, 53804..53947, 54578..54745, 54626..54730 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22165                      | Seq. ID | OJ990515_20.9924.C5 |
| Gene No. | 46194                      | Strand  | -                   |
| Start    | 54581                      | End     | 58224               |
| Name     | OJ990515_20.9924.C5.o13.gs | Method  | GENSCAN             |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 54581  | End   | 58224 |
| GI    | none   | Score | .99   |
| Exons | 54581..55567, 56230..56362, 56450..56531, 56658..56796,<br>56861..56953, 57079..57198, 57633..57723, 57832..57923,<br>58006..58224 |       |       |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22165   | Seq. ID | OJ990515_20.9924.C5 |
| Gene No.    | 46194   | Strand  | -                   |
| Start       | 54581   | End     | 58224               |
| Name        | OJ990515_20.9924.C5.o16.np  | Method  | AAT/NAP             |
| Start       | 54584   | End     | 58185               |
| GI          | 4455232   | Score   | 1353                |
| Exons       | 54584..54875, 54912..55567, 56230..56362, 56663..56796,<br>56861..56953, 57079..57219, 57987..58185 |         |                     |
| GI Descrip. | (AL035523) putative protein [Arabidopsis thaliana]  |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22166                     | Seq. ID | OJ990515_20.9924.C6 |
| Gene No. | 46195                     | Strand  | +                   |
| Start    | 618                       | End     | 812                 |
| Name     | OJ990515_20.9924.C6.o1.gs | Method  | GENSCAN             |
| Start    | 618                       | End     | 812                 |
| GI       | none                      | Score   | .64                 |
| Exons    | 618..812                  |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22166                     | Seq. ID | OJ990515_20.9924.C6 |
| Gene No. | 46196                     | Strand  | -                   |
| Start    | 952                       | End     | 1391                |
| Name     | OJ990515_20.9924.C6.o1.gp | Method  | AAT/GAP             |
| Start    | 952                       | End     | 1391                |
| GI       | 3760163                   | Score   | 765                 |
| Exons    | 952..1391                 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22166  | Seq. ID | OJ990515_20.9924.C6 |
| Gene No.    | 46197  | Strand  | -                   |
| Start       | 1402   | End     | 2032                |
| Name        | OJ990515_20.9924.C6.o1.np  | Method  | AAT/NAP             |
| Start       | 1402   | End     | 2032                |
| GI          | 4704662  | Score   | 244                 |
| Exons       | 1402..1548, 1640..1722, 2000..2032                                   |         |                     |
| GI Descrip. | (AF116860) uracil phosphoribosyltransferase 1 [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22166                     | Seq. ID | OJ990515_20.9924.C6 |
| Gene No. | 46197                     | Strand  | -                   |
| Start    | 1402                      | End     | 2032                |
| Name     | OJ990515_20.9924.C6.o2.gs | Method  | GENSCAN             |
| Start    | 1402                      | End     | 1722                |
| GI       | none                      | Score   | .95                 |
| Exons    | 1402..1548, 1640..1722    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22166  | Seq. ID | OJ990515_20.9924.C6 |
| Gene No. | 46197  | Strand  | -                   |
| Start    | 1402   | End     | 2032                |
| Name     | OJ990515_20.9924.C6.o1.tc                      | Method  | TBLASTX:Cress       |
| Start    | 1405   | End     | 1735                |
| GI       | none   | Score   | 141                 |
| Exons    | 1405..1548, 1409..1564, 1640..1735, 1641..1724 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22166                              | Seq. ID | OJ990515_20.9924.C6 |
| Gene No. | 46197                              | Strand  | -                   |
| Start    | 1402                               | End     | 2032                |
| Name     | OJ990515_20.9924.C6.ol.ts          | Method  | TBLASTX:Soybean     |
| Start    | 1405                               | End     | 1681                |
| GI       | none                               | Score   | 136                 |
| Exons    | 1405..1548, 1406..1564, 1640..1681 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22166  | Seq. ID | OJ990515_20.9924.C6 |
| Gene No. | 46197  | Strand  | -                   |
| Start    | 1402   | End     | 2032                |
| Name     | OJ990515_20.9924.C6.ol.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 1408   | End     | 1735                |
| GI       | none   | Score   | 106                 |
| Exons    | 1408..1446, 1429..1548, 1430..1564, 1640..1735, 1641..1724 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22167  | Seq. ID | OJ990515_20.9924.C7 |
| Gene No.    | 46198  | Strand  | -                   |
| Start       | 1  | End     | 4036                |
| Name        | OJ990515_20.9924.C7.ol.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 4036                |
| GI          | 3953458  | Score   | 1039                |
| Exons       | 1..142, 562..622, 1313..1373, 1494..1577, 1667..1861, 1996..2278, 2569..2687, 2795..2864, 3760..3855, 3933..4036 |         |                     |
| GI Descrip. | (AC002328) F20N2.3 [Arabidopsis thaliana]  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22167  | Seq. ID | OJ990515_20.9924.C7 |
| Gene No. | 46198  | Strand  | -                   |
| Start    | 1  | End     | 4036                |
| Name     | OJ990515_20.9924.C7.ol.tm  | Method  | TBLASTX:Maize       |
| Start    | 23   | End     | 2270                |
| GI       | none   | Score   | 41                  |
| Exons    | 23..64, 64..147, 67..159, 71..169, 80..160, 562..624, 563..616, 564..623, 1311..1373, 1312..1374, 1491..1580, 1506..1580, 1661..1861, 1662..1862, 1666..1869, 1668..1877, 1669..1893, 1982..2077, 1983..2078, 1998..2078, 2109..2270, 2186..2269 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22167  | Seq. ID | OJ990515_20.9924.C7 |
| Gene No. | 46198  | Strand  | -                   |
| Start    | 1  | End     | 4036                |
| Name     | OJ990515_20.9924.C7.ol.ts  | Method  | TBLASTX:Soybean     |
| Start    | 44   | End     | 3853                |
| GI       | none   | Score   | 126                 |
| Exons    | 44..160, 56..160, 562..624, 564..623, 1311..1373, 1312..1374, 1494..1580, 1506..1580, 1661..1861, 1662..1862, 1664..1864, 1668..1862, 2183..2278, 2184..2279, 2566..2688, 2567..2659, 2779..2865, 2796..2867, 3760..3852, 3767..3853 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22167   | Seq. ID | OJ990515_20.9924.C7 |
| Gene No. | 46198   | Strand  | -                   |
| Start    | 1   | End     | 4036                |
| Name     | OJ990515_20.9924.C7.ol.gs   | Method  | GENSCAN             |
| Start    | 49  | End     | 3887                |
| GI       | none  | Score   | .76                 |
| Exons    | 49..142, 562..665, 1667..1861, 1996..2075, 2182..2278, 2569..2687, 2795..2864, 3760..3887 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22167   | Seq. ID | OJ990515_20.9924.C7 |
| Gene No.    | 46198   | Strand  | -                   |
| Start       | 1   | End     | 4036                |
| Name        | OJ990515_20.9924.C7.o1.gp                                   | Method  | AAT/GAP             |
| Start       | 1321  | End     | 2220                |
| GI          | LIB3477-010-P1-K1-H4  | Score   | 814                 |
| Exons       | 1321..1373, 1494..1577, 1667..1861, 1996..2075, 2182..2220  |         |                     |
| GI Descrip. | '3953458 1.0e-56 (AC002328) F20N2.3 [Arabidopsis thaliana]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22167  | Seq. ID | OJ990515_20.9924.C7 |
| Gene No. | 46198  | Strand  | -                   |
| Start    | 1  | End     | 4036                |
| Name     | OJ990515_20.9924.C7.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 1536   | End     | 1865                |
| GI       | none   | Score   | 82                  |
| Exons    | 1536..1580, 1661..1861, 1674..1862, 1675..1785, 1679..1852, 1698..1865 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22167  | Seq. ID | OJ990515_20.9924.C7 |
| Gene No. | 46198  | Strand  | -                   |
| Start    | 1  | End     | 4036                |
| Name     | OJ990515_20.9924.C7.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 2558   | End     | 3983                |
| GI       | none   | Score   | 135                 |
| Exons    | 2558..2686, 2566..2688, 2567..2659, 2569..2688, 2779..2865, 2792..2866, 2796..2867, 3758..3853, 3760..3852, 3800..3853, 3939..3983, 3940..3975 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22168                     | Seq. ID | OJ990515_20.9924.C8 |
| Gene No. | 46199                     | Strand  | -                   |
| Start    | 333                       | End     | 1038                |
| Name     | OJ990515_20.9924.C8.o1.gp | Method  | AAT/GAP             |
| Start    | 333                       | End     | 1038                |
| GI       | 5851018                   | Score   | 1360                |
| Exons    | 333..1038                 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22168  | Seq. ID | OJ990515_20.9924.C8 |
| Gene No.    | 46200  | Strand  | -                   |
| Start       | 1416   | End     | 6056                |
| Name        | OJ990515_20.9924.C8.o2.gp  | Method  | AAT/GAP             |
| Start       | 1106   | End     | 3803                |
| GI          | 958_1.R1084  | Score   | 1917                |
| Exons       | 1106..1571, 1715..1756, 1873..1965, 2617..2714, 2779..2885, 2968..3030, 3640..3803                       |         |                     |
| GI Descrip. | '6007803/gb AAF01048.1 AF189365_1 1.0e-122 (AF189365) D-ribulose-5-phosphate 3-epimerase [Oryza sativa]' |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22168   | Seq. ID | OJ990515_20.9924.C8 |
| Gene No. | 46200   | Strand  | -                   |
| Start    | 1416  | End     | 6056                |
| Name     | OJ990515_20.9924.C8.o1.tw   | Method  | TBLASTX:Wheat       |
| Start    | 1350  | End     | 2673                |
| GI       | none  | Score   | 53                  |
| Exons    | 1350..1418, 1363..1395, 1367..1396, 1387..1572, 1414..1515, 1422..1571, 1496..1582, 1712..1756, 1713..1757, 1714..1761, 1715..1771, 1855..1965, 1862..1966, 1871..1966, 2605..2673, |         |                     |

2609..2668, 2614..2673

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22168  | Seq. ID | OJ990515_20.9924.C8 |
| Gene No. | 46200  | Strand  | -                   |
| Start    | 1416   | End     | 6056                |
| Name     | OJ990515_20.9924.C8.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 1399   | End     | 1793                |
| GI       | none   | Score   | 241                 |
| Exons    | 1399..1572, 1413..1583, 1422..1571, 1496..1588, 1712..1765, 1713..1793 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22168  | Seq. ID | OJ990515_20.9924.C8 |
| Gene No. | 46200  | Strand  | -                   |
| Start    | 1416   | End     | 6056                |
| Name     | OJ990515_20.9924.C8.o1.gs  | Method  | GENSCAN             |
| Start    | 1416   | End     | 5921                |
| GI       | none   | Score   | .77                 |
| Exons    | 1416..1571, 1873..1965, 3125..3215, 3642..3884, 4602..4651, 4751..4837, 5011..5153, 5269..5398, 5840..5921 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22168  | Seq. ID | OJ990515_20.9924.C8 |
| Gene No.    | 46200  | Strand  | -                   |
| Start       | 1416   | End     | 6056                |
| Name        | OJ990515_20.9924.C8.o1.np  | Method  | AAT/NAP             |
| Start       | 1419   | End     | 3769                |
| GI          | 6007803  | Score   | 963                 |
| Exons       | 1419..1571, 1715..1756, 1873..1965, 2617..2714, 2779..2885, 2968..3030, 3642..3769 |         |                     |
| GI Descrip. | (AF189365) D-ribulose-5-phosphate 3-epimerase [Oryza sativa]                       |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22168  | Seq. ID | OJ990515_20.9924.C8 |
| Gene No. | 46200  | Strand  | -                   |
| Start    | 1416   | End     | 6056                |
| Name     | OJ990515_20.9924.C8.o2.tc  | Method  | TBLASTX:Cress       |
| Start    | 1428   | End     | 3740                |
| GI       | none   | Score   | 163                 |
| Exons    | 1428..1571, 1438..1572, 1709..1768, 1712..1771, 1861..1965, 1871..1966, 1871..1972, 2614..2715, 2615..2716, 2750..2932, 2783..2884, 2787..2918, 2970..3029, 2971..3030, 2973..3038, 3645..3740, 3647..3739 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22168  | Seq. ID | OJ990515_20.9924.C8 |
| Gene No. | 46200  | Strand  | -                   |
| Start    | 1416   | End     | 6056                |
| Name     | OJ990515_20.9924.C8.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 1428   | End     | 3740                |
| GI       | none   | Score   | 170                 |
| Exons    | 1428..1571, 1438..1572, 1447..1572, 1496..1573, 1712..1756, 1713..1757, 1715..1771, 1855..1965, 1862..1966, 1875..1973, 1877..1972, 2608..2715, 2609..2716, 2771..2932, 2775..2918, 2967..3038, 2967..3029, 2971..3039, 3628..3690, 3629..3691, 3645..3740, 3647..3739 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22168                     | Seq. ID | OJ990515_20.9924.C8 |
| Gene No. | 46200                     | Strand  | -                   |
| Start    | 1416                      | End     | 6056                |
| Name     | OJ990515_20.9924.C8.o2.tm | Method  | TBLASTX:Maize       |

|       |  |       |      |
|-------|--|-------|------|
| Start | 1855   | End   | 3749 |
| GI    | none   | Score | 147  |
| Exons | 1855..1965, 1862..1966, 1871..1972, 2605..2715, 2609..2716,<br>2614..2733, 2616..2723, 2771..2932, 2775..2918, 2967..3029,<br>2968..3039, 3645..3740, 3647..3739, 3723..3749 |       |      |

  

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22168   | Seq. ID | OJ990515_20.9924.C8 |
| Gene No.    | 46200   | Strand  | -                   |
| Start       | 1416  | End     | 6056                |
| Name        | OJ990515_20.9924.C8.o3.gp   | Method  | AAT/GAP             |
| Start       | 4341  | End     | 5921                |
| GI          | 57_1.R1084  | Score   | 1379                |
| Exons       | 4341..4651, 4751..4837, 5011..5153, 5269..5398, 5840..5921                                  |         |                     |
| GI Descrip. | '3138799/dbj BAA28276  1.0e-124 (AB014058) beta 6 subunit of 20S proteasome [Oryza sativa]' |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22168   | Seq. ID | OJ990515_20.9924.C8 |
| Gene No. | 46200   | Strand  | -                   |
| Start    | 1416  | End     | 6056                |
| Name     | OJ990515_20.9924.C8.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 4418  | End     | 5921                |
| GI       | none  | Score   | 48                  |
| Exons    | 4418..4492, 4430..4492, 4528..4602, 4559..4684, 4578..4652,<br>4741..4836, 4747..4839, 4751..4840, 5009..5155, 5011..5154,<br>5016..5165, 5246..5398, 5276..5395, 5277..5402, 5298..5399,<br>5836..5916, 5837..5920, 5838..5921 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22168   | Seq. ID | OJ990515_20.9924.C8 |
| Gene No. | 46200   | Strand  | -                   |
| Start    | 1416  | End     | 6056                |
| Name     | OJ990515_20.9924.C8.o1.tc   | Method  | TBLASTX:Cress       |
| Start    | 4577  | End     | 5920                |
| GI       | none  | Score   | 70                  |
| Exons    | 4577..4684, 4578..4685, 4751..4840, 4752..4853, 5017..5154,<br>5018..5155, 5246..5398, 5267..5395, 5837..5920 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22168   | Seq. ID | OJ990515_20.9924.C8 |
| Gene No. | 46200   | Strand  | -                   |
| Start    | 1416  | End     | 6056                |
| Name     | OJ990515_20.9924.C8.o1.ts   | Method  | TBLASTX:Soybean     |
| Start    | 4577  | End     | 5921                |
| GI       | none  | Score   | 91                  |
| Exons    | 4577..4684, 4578..4700, 4751..4840, 4758..4841, 5011..5154,<br>5015..5155, 5246..5398, 5264..5395, 5837..5920, 5847..5921 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22168   | Seq. ID | OJ990515_20.9924.C8 |
| Gene No.    | 46200   | Strand  | -                   |
| Start       | 1416  | End     | 6056                |
| Name        | OJ990515_20.9924.C8.o2.np   | Method  | AAT/NAP             |
| Start       | 4580  | End     | 6056                |
| GI          | 3138799   | Score   | 735                 |
| Exons       | 4580..4651, 4751..4837, 5011..5153, 5269..5398, 5840..5921,<br>5996..6056 |         |                     |
| GI Descrip. | (AB014058) beta 6 subunit of 20S proteasome [Oryza sativa]                |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22169 | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46201 | Strand  | +                   |

|       |  |        |         |
|-------|--|--------|---------|
| Start | 11425  | End    | 13963   |
| Name  | OJ990515_20.9924.C9.o2.gs                              | Method | GENSCAN |
| Start | 11425  | End    | 13963   |
| GI    | none   | Score  | .64     |
| Exons | 11425..12137, 12973..13058, 13433..13796, 13891..13963 |        |         |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No.    | 46201  | Strand  | +                   |
| Start       | 11425  | End     | 13963               |
| Name        | OJ990515_20.9924.C9.o3.np  | Method  | AAT/NAP             |
| Start       | 11425  | End     | 13954               |
| GI          | 3785972  | Score   | 481                 |
| Exons       | 11425..11707, 11747..12212, 12240..12878, 12918..13058, 13433..13590, 13720..13796, 13891..13954 |         |                     |
| GI Descrip. | (AC005560) putative auxin transport protein [Arabidopsis thaliana]                               |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No.    | 46202  | Strand  | +                   |
| Start       | 18548  | End     | 22121               |
| Name        | OJ990515_20.9924.C9.o4.np  | Method  | AAT/NAP             |
| Start       | 18012  | End     | 21823               |
| GI          | 1076361  | Score   | 998                 |
| Exons       | 18012..18200, 18722..18862, 19889..20022, 20111..20224, 20769..20864, 21169..21256, 21340..21408, 21569..21823   |         |                     |
| GI Descrip. | oleoyl-[acyl-carrier-protein] hydrolase (EC 3.1.2.14) - Arabidopsis thaliana gi 2129660 pir  S69197<br>oleoyl-[acyl-carrier-protein] hydrolase (EC 3.1.2.14) (clone TE 1-7) - Arabidopsis thaliana gi 804946 emb CAA85389  (Z36912)<br>acyl-(acyl carrier protein) thioesterase [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22169                     | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46202                     | Strand  | +                   |
| Start    | 18548                     | End     | 22121               |
| Name     | OJ990515_20.9924.C9.o3.gs | Method  | GENSCAN             |
| Start    | 18548                     | End     | 19042               |
| GI       | none                      | Score   | .85                 |
| Exons    | 18548..19042              |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46202  | Strand  | +                   |
| Start    | 18548  | End     | 22121               |
| Name     | OJ990515_20.9924.C9.o4.gs  | Method  | GENSCAN             |
| Start    | 19955  | End     | 21823               |
| GI       | none   | Score   | .92                 |
| Exons    | 19955..20022, 20111..20224, 20769..20811, 21340..21408, 21569..21823 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No.    | 46202  | Strand  | +                   |
| Start       | 18548  | End     | 22121               |
| Name        | OJ990515_20.9924.C9.o2.gp  | Method  | AAT/GAP             |
| Start       | 21569  | End     | 22121               |
| GI          | 84014_1.R1084  | Score   | 1028                |
| Exons       | 21569..22121   |         |                     |
| GI Descrip. | '1930079 7.0e-19 (U92877) acyl-ACP thioesterase [Garcinia mangostana]' |         |                     |



|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No.    | 46203  | Strand  | -                   |
| Start       | 1  | End     | 10833               |
| Name        | OJ990515_20.9924.C9.o1.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 1483                |
| GI          | 3138799  | Score   | 205                 |
| Exons       | 1..24, 1238..1345, 1443..1483  |         |                     |
| GI Descrip. | (AB014058) beta 6 subunit of 20S proteasome [Oryza sativa]   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No.    | 46203  | Strand  | -                   |
| Start       | 1  | End     | 10833               |
| Name        | OJ990515_20.9924.C9.o4.tm  | Method  | TBLASTX:Maize       |
| Start       | 1167   | End     | 1527                |
| GI          | none   | Score   | 78                  |
| Exons       | 1167..1280, 1202..1279, 1237..1332, 1240..1350, 1287..1337, 1442..1471, 1443..1523, 1443..1508, 1480..1527   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No.    | 46203  | Strand  | -                   |
| Start       | 1  | End     | 10833               |
| Name        | OJ990515_20.9924.C9.o1.gp  | Method  | AAT/GAP             |
| Start       | 1188   | End     | 1597                |
| GI          | 57_1.R1084   | Score   | 474                 |
| Exons       | 1188..1345, 1443..1597   |         |                     |
| GI Descrip. | '3138799/dbj BAA28276  1.0e-124 (AB014058) beta 6 subunit of 20S proteasome [Oryza sativa]'  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No.    | 46203  | Strand  | -                   |
| Start       | 1  | End     | 10833               |
| Name        | OJ990515_20.9924.C9.o1.tw  | Method  | TBLASTX:Wheat       |
| Start       | 1237   | End     | 1505                |
| GI          | none   | Score   | 139                 |
| Exons       | 1237..1350, 1237..1332, 1238..1375, 1287..1337, 1442..1471, 1443..1505, 1443..1493   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No.    | 46203  | Strand  | -                   |
| Start       | 1  | End     | 10833               |
| Name        | OJ990515_20.9924.C9.o1.gs  | Method  | GENSCAN             |
| Start       | 1238   | End     | 10833               |
| GI          | none   | Score   | .46                 |
| Exons       | 1238..1345, 1443..1528, 2859..2991, 3414..3510, 3868..3920, 3955..4217, 4295..4393, 4475..4820, 4864..5069, 5162..5353, 5430..5512, 5543..5827, 5922..6192, 6465..7247, 7292..8343, 8879..8989, 9068..9223, 10200..10274, 10815..10833 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No.    | 46203  | Strand  | -                   |
| Start       | 1  | End     | 10833               |
| Name        | OJ990515_20.9924.C9.o2.np  | Method  | AAT/NAP             |
| Start       | 3272   | End     | 7079                |
| GI          | 6815062  | Score   | 3694                |
| Exons       | 3272..3504, 3559..3579, 3878..4217, 4295..4393, 4475..4820, 4864..5069, 5162..5353, 5430..5827, 5922..7079   |         |                     |

GI Descrip. (AP001080) Similar to Arabidopsis thaliana chromosome II BAC F16P2 genomic sequence;mudrA like protein (AC004561) [Oryza sativa]

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46203  | Strand  | -                   |
| Start    | 1  | End     | 10833               |
| Name     | OJ990515_20.9924.C9.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 4475   | End     | 5598                |
| GI       | none   | Score   | 67                  |
| Exons    | 4475..4771, 4863..4889, 4896..5063, 4915..5013, 5144..5221, 5231..5272, 5294..5365, 5427..5597, 5434..5598 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46203  | Strand  | -                   |
| Start    | 1  | End     | 10833               |
| Name     | OJ990515_20.9924.C9.o5.tm  | Method  | TBLASTX:Maize       |
| Start    | 5601   | End     | 6084                |
| GI       | none   | Score   | 57                  |
| Exons    | 5601..5696, 5605..5700, 5706..5735, 5730..5837, 5752..5838, 5899..6084, 5906..6082 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46203  | Strand  | -                   |
| Start    | 1  | End     | 10833               |
| Name     | OJ990515_20.9924.C9.o2.tm                      | Method  | TBLASTX:Maize       |
| Start    | 6549   | End     | 7038                |
| GI       | none   | Score   | 188                 |
| Exons    | 6549..6860, 6571..6861, 6879..7034, 6913..7038 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22169                      | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46204                      | Strand  | -                   |
| Start    | 11416                      | End     | 11802               |
| Name     | OJ990515_20.9924.C9.o2.tc  | Method  | TBLASTX:Cress       |
| Start    | 11416                      | End     | 11802               |
| GI       | none                       | Score   | 175                 |
| Exons    | 11416..11634, 11761..11802 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22169                      | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46204                      | Strand  | -                   |
| Start    | 11416                      | End     | 11802               |
| Name     | OJ990515_20.9924.C9.o6.tm  | Method  | TBLASTX:Maize       |
| Start    | 11418                      | End     | 11634               |
| GI       | none                       | Score   | 199                 |
| Exons    | 11418..11561, 11422..11634 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22169   | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46205   | Strand  | -                   |
| Start    | 18538   | End     | 21955               |
| Name     | OJ990515_20.9924.C9.o3.tm   | Method  | TBLASTX:Maize       |
| Start    | 18538   | End     | 21955               |
| GI       | none  | Score   | 64                  |
| Exons    | 18538..18582, 18548..18577, 18713..18862, 18777..18806, 18790..18852, 19883..20023, 19888..20019, 20109..20222, 20111..20251, 20112..20222, 20758..20862, 20764..20865, 20765..20863, 20766..20873, 20766..20864, 21132..21245, 21166..21261, 21167..21256, 21324..21413, 21334..21408, |         |                     |

21566..21742, 21569..21742, 21607..21756, 21674..21823,  
21712..21822, 21726..21866, 21923..21955

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46205  | Strand  |                     |
| Start    | 18538  | End     | 21955               |
| Name     | OJ990515_20.9924.C9.ol.tc  | Method  | TBLASTX:Cress       |
| Start    | 18728  | End     | 21811               |
| GI       | none   | Score   | 183                 |
| Exons    | 18728..18862, 18796..18852, 19883..20023, 19885..20019,<br>19886..20023, 20103..20219, 20111..20242, 20112..20222,<br>20758..20865, 20764..20865, 21166..21249, 21167..21253,<br>21313..21399, 21334..21408, 21339..21413, 21566..21667,<br>21568..21642, 21695..21811, 21697..21810 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22169  | Seq. ID | OJ990515_20.9924.C9 |
| Gene No. | 46205  | Strand  |                     |
| Start    | 18538  | End     | 21955               |
| Name     | OJ990515_20.9924.C9.ol.ts  | Method  | TBLASTX:Soybean     |
| Start    | 18731  | End     | 21808               |
| GI       | none   | Score   | 110                 |
| Exons    | 18731..18862, 19883..20023, 19901..20023, 20111..20251,<br>20112..20246, 20764..20838, 21334..21408, 21566..21673,<br>21770..21808 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22170   | Seq. ID | OJ990715_14.9922.C1 |
| Gene No.    | 46206   | Strand  | +                   |
| Start       | 1   | End     | 195                 |
| Name        | OJ990715_14.9922.C1.ol.gp   | Method  | AAT/GAP             |
| Start       | 1   | End     | 195                 |
| GI          | 342_1.R1084   | Score   | 340                 |
| Exons       | 1..195  |         |                     |
| GI Descrip. | '4574406/gb AAD24042.1  0.0e+00 (AF121139) RIM2 protein [Oryza sativa]' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22170  | Seq. ID | OJ990715_14.9922.C1 |
| Gene No.    | 46206  | Strand  | +                   |
| Start       | 1  | End     | 195                 |
| Name        | OJ990715_14.9922.C1.ol.np                      | Method  | AAT/NAP             |
| Start       | 1  | End     | 195                 |
| GI          | 4680203  | Score   | 163                 |
| Exons       | 1..195   |         |                     |
| GI Descrip. | (AF114171) TNP2-like protein [Sorghum bicolor] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22170                     | Seq. ID | OJ990715_14.9922.C1 |
| Gene No. | 46207                     | Strand  | -                   |
| Start    | 94                        | End     | 144                 |
| Name     | OJ990715_14.9922.C1.ol.gs | Method  | GENSCAN             |
| Start    | 94                        | End     | 144                 |
| GI       | none                      | Score   | .6                  |
| Exons    | 94..144                   |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22171                     | Seq. ID | OJ990715_14.9922.C2 |
| Gene No. | 46208                     | Strand  | +                   |
| Start    | 137                       | End     | 4784                |
| Name     | OJ990715_14.9922.C2.ol.gs | Method  | GENSCAN             |
| Start    | 137                       | End     | 4765                |

GI none Score .68  
Exons 137..210, 1070..1225, 1290..2489, 2564..3663, 3773..3946, 4043..4153, 4238..4310, 4583..4765

Seq. No. 22171 Seq. ID OJ990715\_14.9922.C2  
Gene No. 46208 Strand +  
Start 137 End 4784  
Name OJ990715\_14.9922.C2.o1.np Method AAT/NAP  
Start 1055 End 4784  
GI 4680204 Score 1065  
Exons 1055..2489, 2564..3663, 3773..3946, 4043..4262, 4613..4708, 4743..4784  
GI Descrip. (AF114171) hypothetical protein [Sorghum bicolor]

Seq. No. 22171 Seq. ID OJ990715\_14.9922.C2  
Gene No. 46209 Strand +  
Start 12012 End 13758  
Name OJ990715\_14.9922.C2.o3.np Method AAT/NAP  
Start 12012 End 13758  
GI 4467124 Score 330  
Exons 12012..12871, 13476..13758  
GI Descrip. (AL035538) hypothetical protein [Arabidopsis thaliana]

Seq. No. 22171 Seq. ID OJ990715\_14.9922.C2  
Gene No. 46210 Strand +  
Start 15073 End 15178  
Name OJ990715\_14.9922.C2.o3.gp Method AAT/GAP  
Start 15073 End 15178  
GI 5816518 Score 159  
Exons 15073..15178  
GI Descrip. 4521193/dbj|AB013450.1|AB013450 3.0e-40 Oryza sativa DNA, similar sequence to Pib gene

Seq. No. 22171 Seq. ID OJ990715\_14.9922.C2  
Gene No. 46211 Strand +  
Start 17694 End 18186  
Name OJ990715\_14.9922.C2.o4.np Method AAT/NAP  
Start 17694 End 18186  
GI 5091512 Score 619  
Exons 17694..18186  
GI Descrip. (AB023482) Similar to Plasmodium vivax circumsporozoite protein gene, complete cds. (M11926) [Oryza sativa]

Seq. No. 22171 Seq. ID OJ990715\_14.9922.C2  
Gene No. 46212 Strand -  
Start 5155 End 5300  
Name OJ990715\_14.9922.C2.o1.gp Method AAT/GAP  
Start 5155 End 5300  
GI 21474\_1.R1084 Score 253  
Exons 5155..5300  
GI Descrip. '3894159 2.0e-10 (AC005312) hypothetical protein [Arabidopsis thaliana]'

Seq. No. 22171 Seq. ID OJ990715\_14.9922.C2  
Gene No. 46213 Strand -  
Start 10044 End 15064  
Name OJ990715\_14.9922.C2.o3.gs Method GENSCAN

|       |   |       |       |
|-------|---|-------|-------|
| Start | 10044   | End   | 14942 |
| GI    | none  | Score | .75   |
| Exons | 10044..10222, 10381..10616, 10745..10866, 11765..11844,<br>13033..13359, 14095..14189, 14636..14809, 14878..14942 |       |       |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22171   | Seq. ID | OJ990715_14.9922.C2 |
| Gene No.    | 46213   | Strand  | -                   |
| Start       | 10044   | End     | 15064               |
| Name        | OJ990715_14.9922.C2.o2.gp   | Method  | AAT/GAP             |
| Start       | 14840   | End     | 15064               |
| GI          | 3761181   | Score   | 345                 |
| Exons       | 14840..15064  |         |                     |
| GI Descrip. | 4521193/dbj AB013450.1 AB013450 1.0e-99 Oryza sativa DNA,<br>similar sequence to Pib gene |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22171   | Seq. ID | OJ990715_14.9922.C2 |
| Gene No. | 46214   | Strand  | -                   |
| Start    | 16759   | End     | 18176               |
| Name     | OJ990715_14.9922.C2.o1.tw   | Method  | TBLASTX:Wheat       |
| Start    | 1696  | End     | 2099                |
| GI       | none  | Score   | 62                  |
| Exons    | 1696..1836, 1696..1812, 1698..1934, 1698..1847, 1799..1939,<br>1929..2099, 2004..2099 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22171  | Seq. ID | OJ990715_14.9922.C2 |
| Gene No. | 46214  | Strand  | -                   |
| Start    | 16759  | End     | 18176               |
| Name     | OJ990715_14.9922.C2.o2.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 2100   | End     | 2776                |
| GI       | none   | Score   | 69                  |
| Exons    | 2100..2180, 2421..2492, 2555..2776, 2557..2631 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22171  | Seq. ID | OJ990715_14.9922.C2 |
| Gene No. | 46214  | Strand  | -                   |
| Start    | 16759  | End     | 18176               |
| Name     | OJ990715_14.9922.C2.o3.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 3590   | End     | 4112                |
| GI       | none   | Score   | 61                  |
| Exons    | 3590..3670, 3759..3941, 3809..3934, 4041..4112 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22171                                    | Seq. ID | OJ990715_14.9922.C2 |
| Gene No. | 46214                                    | Strand  | -                   |
| Start    | 16759                                    | End     | 18176               |
| Name     | OJ990715_14.9922.C2.o4.gs                | Method  | GENSCAN             |
| Start    | 16759                                    | End     | 18176               |
| GI       | none                                     | Score   | .6                  |
| Exons    | 16759..16973, 17345..17567, 17622..18176 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22172   | Seq. ID | OJ990715_14.9922.C3 |
| Gene No.    | 46215   | Strand  | +                   |
| Start       | 1   | End     | 369                 |
| Name        | OJ990715_14.9922.C3.o1.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 369                 |
| GI          | 5091512   | Score   | 469                 |
| Exons       | 1..369  |         |                     |
| GI Descrip. | (AB023482) Similar to Plasmodium vivax circumsporozoite protein<br>gene, complete cds.(M11926) [Oryza sativa] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22173                                       | Seq. ID | OJ990715_14.9922.C6 |
| Gene No.    | 46216                                       | Strand  | -                   |
| Start       | 1   | End     | 530                 |
| Name        | OJ990715_14.9922.C6.o1.np                   | Method  | AAT/NAP             |
| Start       | 1   | End     | 530                 |
| GI          | 5902444                                     | Score   | 306                 |
| Exons       | 1..413, 507..530                            |         |                     |
| GI Descrip. | (AB030283) GAG-POL precursor [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22173                     | Seq. ID | OJ990715_14.9922.C6 |
| Gene No. | 46216                     | Strand  | -                   |
| Start    | 1                         | End     | 530                 |
| Name     | OJ990715_14.9922.C6.o1.gs | Method  | GENSCAN             |
| Start    | 157                       | End     | 356                 |
| GI       | none                      | Score   | .86                 |
| Exons    | 157..356                  |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22174                     | Seq. ID | OJ990715_14.9922.C7 |
| Gene No. | 46217                     | Strand  | +                   |
| Start    | 229                       | End     | 352                 |
| Name     | OJ990715_14.9922.C7.o1.gs | Method  | GENSCAN             |
| Start    | 229                       | End     | 352                 |
| GI       | none                      | Score   | .81                 |
| Exons    | 229..352                  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22175  | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46218  | Strand  | +                   |
| Start    | 3776   | End     | 7331                |
| Name     | OJ990715_14.9922.C8.o3.gs                      | Method  | GENSCAN             |
| Start    | 3776   | End     | 7331                |
| GI       | none   | Score   | .56                 |
| Exons    | 3776..3861, 4993..5090, 6997..7043, 7158..7331 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22175  | Seq. ID | OJ990715_14.9922.C8 |
| Gene No.    | 46219  | Strand  | +                   |
| Start       | 11741  | End     | 13404               |
| Name        | OJ990715_14.9922.C8.o2.np                      | Method  | AAT/NAP             |
| Start       | 10407  | End     | 11843               |
| GI          | 6907088  | Score   | 968                 |
| Exons       | 10407..10544, 10720..10957, 11452..11843       |         |                     |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22175                      | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46219                      | Strand  | +                   |
| Start    | 11741                      | End     | 13404               |
| Name     | OJ990715_14.9922.C8.o5.gs  | Method  | GENSCAN             |
| Start    | 11741                      | End     | 13404               |
| GI       | none                       | Score   | .53                 |
| Exons    | 11741..12075, 13356..13404 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22175                     | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46219                     | Strand  | +                   |
| Start    | 11741                     | End     | 13404               |
| Name     | OJ990715_14.9922.C8.o3.np | Method  | AAT/NAP             |
| Start    | 11828                     | End     | 13167               |
| GI       | 5734635                   | Score   | 259                 |

Exons 11828..11925, 11977..12243, 12431..13167  
 GI Descrip. (AP000391) hypothetical protein [Oryza sativa]

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22175                     | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46220                     | Strand  | +                   |
| Start    | 18372                     | End     | 20682               |
| Name     | OJ990715_14.9922.C8.o4.np | Method  | AAT/NAP             |
| Start    | 18041                     | End     | 20682               |
| GI       | 6907088                   | Score   | 126                 |

Exons 18041..18074, 19255..19418, 20650..20682  
 GI Descrip. (AP001129) hypothetical protein [Oryza sativa]

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22175                     | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46220                     | Strand  | +                   |
| Start    | 18372                     | End     | 20682               |
| Name     | OJ990715_14.9922.C8.o7.gs | Method  | GENSCAN             |
| Start    | 18372                     | End     | 20384               |
| GI       | none                      | Score   | .94                 |

Exons 18372..18394, 19003..19027, 19717..19854, 20262..20384

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22175                     | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46221                     | Strand  | -                   |
| Start    | 1                         | End     | 2166                |
| Name     | OJ990715_14.9922.C8.o1.gp | Method  | AAT/GAP             |
| Start    | 1                         | End     | 1338                |
| GI       | 2310235                   | Score   | 299                 |

Exons 1..27, 752..890, 1301..1338  
 GI Descrip. 5852182/emb|CAB55420.1| 9.0e-13 (AL117265) zhb0012.1 [Oryza sativa]

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22175                     | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46221                     | Strand  | -                   |
| Start    | 1                         | End     | 2166                |
| Name     | OJ990715_14.9922.C8.o1.np | Method  | AAT/NAP             |
| Start    | 1                         | End     | 2166                |
| GI       | 4680203                   | Score   | 991                 |

Exons 1..890, 2134..2166  
 GI Descrip. (AF114171) TNP2-like protein [Sorghum bicolor]

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22175                     | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46221                     | Strand  | -                   |
| Start    | 1                         | End     | 2166                |
| Name     | OJ990715_14.9922.C8.o1.gs | Method  | GENSCAN             |
| Start    | 78                        | End     | 890                 |
| GI       | none                      | Score   | .93                 |

Exons 78..890

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22175                     | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46222                     | Strand  | -                   |
| Start    | 2160                      | End     | 2414                |
| Name     | OJ990715_14.9922.C8.o2.gs | Method  | GENSCAN             |
| Start    | 2160                      | End     | 2414                |
| GI       | none                      | Score   | .63                 |

Exons 2160..2414

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22175 | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46223 | Strand  | -                   |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 9527   | End    | 10030   |
| Name        | OJ990715_14.9922.C8.o2.gp  | Method | AAT/GAP |
| Start       | 9527   | End    | 10030   |
| GI          | 38782_1.R1084  | Score  | 765     |
| Exons       | 9527..10030  |        |         |
| GI Descrip. | '6069643/dbj AP000616.1 AP000616 0.0e+00 Oryza sativa genomic DNA, chromosome 6, clone:P0514G12' |        |         |

|          |                              |         |                     |
|----------|------------------------------|---------|---------------------|
| Seq. No. | 22175                        | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46224                        | Strand  | -                   |
| Start    | 14189                        | End     | 15554               |
| Name     | OJ990715_14.9922.C8.o1.ts    | Method  | TBLASTX:Soybean     |
| Start    | 126                          | End     | 416                 |
| GI       | none                         | Score   | 103                 |
| Exons    | 126..191, 198..416, 202..408 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22175                                    | Seq. ID | OJ990715_14.9922.C8 |
| Gene No. | 46224                                    | Strand  | -                   |
| Start    | 14189                                    | End     | 15554               |
| Name     | OJ990715_14.9922.C8.o6.gs                | Method  | GENSCAN             |
| Start    | 14189                                    | End     | 15554               |
| GI       | none                                     | Score   | .6                  |
| Exons    | 14189..14212, 14748..14809, 14834..15554 |         |                     |

|          |                               |         |                     |
|----------|-------------------------------|---------|---------------------|
| Seq. No. | 22176                         | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46225                         | Strand  | +                   |
| Start    | 500                           | End     | 1089                |
| Name     | OJ990715_14.9922.C9.o1.gs     | Method  | GENSCAN             |
| Start    | 500                           | End     | 1089                |
| GI       | none                          | Score   | .69                 |
| Exons    | 500..531, 625..804, 892..1089 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22176  | Seq. ID | OJ990715_14.9922.C9 |
| Gene No.    | 46226  | Strand  | +                   |
| Start       | 6168   | End     | 6475                |
| Name        | OJ990715_14.9922.C9.o1.gp  | Method  | AAT/GAP             |
| Start       | 6168   | End     | 6475                |
| GI          | 5816559  | Score   | 496                 |
| Exons       | 6168..6475   |         |                     |
| GI Descrip. | 4680178/gb AF111709.1 AF111709 1.0e-108 Oryza sativa subsp. indica Retrosat 1 retrotransposon and Ty3-Gypsy type Retrosat 2 retrotransposon, complete sequences; and unknown genes |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22176   | Seq. ID | OJ990715_14.9922.C9 |
| Gene No.    | 46227   | Strand  | +                   |
| Start       | 7544  | End     | 10488               |
| Name        | OJ990715_14.9922.C9.o1.np   | Method  | AAT/NAP             |
| Start       | 7544  | End     | 10485               |
| GI          | 6691716   | Score   | 2369                |
| Exons       | 7544..8414, 8613..8805, 8887..9006, 9101..9263, 9338..9525, 9601..9704, 9855..9967, 10040..10485                            |         |                     |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6691717 dbj BAA89397.1  (AP000570) hypothetical protein [Oryza sativa] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22176 | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46227 | Strand  | +                   |



|       |  |        |         |
|-------|--|--------|---------|
| Start | 7544   | End    | 10488   |
| Name  | OJ990715_14.9922.C9.o3.gs  | Method | GENSCAN |
| Start | 7544   | End    | 10488   |
| GI    | none   | Score  | .83     |
| Exons | 7544..8428, 8648..8805, 8887..9263, 9338..9525, 9601..9790, 9863..9967, 10040..10488 |        |         |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22176  | Seq. ID | OJ990715_14.9922.C9 |
| Gene No.    | 46228  | Strand  | +                   |
| Start       | 17032  | End     | 17339               |
| Name        | OJ990715_14.9922.C9.o2.gp  | Method  | AAT/GAP             |
| Start       | 17032  | End     | 17339               |
| GI          | 5816559  | Score   | 496                 |
| Exons       | 17032..17339   |         |                     |
| GI Descrip. | 4680178/gb AF111709.1 AF111709 1.0e-108 Oryza sativa subsp. indica Retrosat 1 retrotransposon and Ty3-Gypsy type Retrosat 2 retrotransposon, complete sequences; and unknown genes |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22176  | Seq. ID | OJ990715_14.9922.C9 |
| Gene No.    | 46229  | Strand  | +                   |
| Start       | 24082  | End     | 24201               |
| Name        | OJ990715_14.9922.C9.o4.gp  | Method  | AAT/GAP             |
| Start       | 24082  | End     | 24201               |
| GI          | LIB3477-003-P1-K1-E9   | Score   | 186                 |
| Exons       | 24082..24201   |         |                     |
| GI Descrip. | '2498586/sp Q40638 MP01_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY S 1 PRECURSOR (ORY S I) >gi_1173557 (U31771) Ory s 1 [Oryza sativa]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176  | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46230  | Strand  | -                   |
| Start    | 2056   | End     | 5656                |
| Name     | OJ990715_14.9922.C9.o2.gs                                  | Method  | GENSCAN             |
| Start    | 2056   | End     | 5656                |
| GI       | none   | Score   | .64                 |
| Exons    | 2056..2161, 3756..3848, 3893..3985, 4077..4282, 5654..5656 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176                                    | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46231                                    | Strand  | -                   |
| Start    | 10805                                    | End     | 16903               |
| Name     | OJ990715_14.9922.C9.o4.gs                | Method  | GENSCAN             |
| Start    | 10805                                    | End     | 16903               |
| GI       | none                                     | Score   | .76                 |
| Exons    | 10805..13886, 13983..14898, 15025..16903 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22176  | Seq. ID | OJ990715_14.9922.C9 |
| Gene No.    | 46231  | Strand  | -                   |
| Start       | 10805  | End     | 16903               |
| Name        | OJ990715_14.9922.C9.o2.np  | Method  | AAT/NAP             |
| Start       | 10841  | End     | 16903               |
| GI          | 5922631  | Score   | 6689                |
| Exons       | 10841..13368, 13975..14898, 15025..15176, 15219..15790, 15836..16038, 16273..16520, 16779..16903   |         |                     |
| GI Descrip. | (AP000492) ESTs C26347(C12145), AU078074(C12145) correspond to a region of the predicted gene.; similar to prpol; Zea mays retrotransposon Cinfu-1. (AF049110) [Oryza sativa] gi 6016864 dbj BAA85207.1  (AP000570) ESTs |         |                     |

C26347(C12145), AU078074(C12145) correspond to a region of the predicted gene.; Similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativ

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176  | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232  | Strand  | -                   |
| Start    | 17812  | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o6.tw  | Method  | TBLASTX:Wheat       |
| Start    | 1860   | End     | 14635               |
| GI       | none   | Score   | 56                  |
| Exons    | 1860..1985, 2785..2862, 14178..14414, 14180..14410, 14459..14572, 14459..14635 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22176                     | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                     | Strand  | -                   |
| Start    | 17812                     | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o9.tw | Method  | TBLASTX:Wheat       |
| Start    | 7664                      | End     | 7954                |
| GI       | none                      | Score   | 216                 |
| Exons    | 7664..7954                |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176  | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232  | Strand  | -                   |
| Start    | 17812  | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o2.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 10817  | End     | 11431               |
| GI       | none   | Score   | 77                  |
| Exons    | 10817..10954, 10940..11431, 11169..11270, 11322..11411 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176  | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232  | Strand  | -                   |
| Start    | 17812  | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o4.tm                              | Method  | TBLASTX:Maize       |
| Start    | 10856  | End     | 11119               |
| GI       | none   | Score   | 100                 |
| Exons    | 10856..10957, 10857..10958, 10937..11119, 10938..10997 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176  | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232  | Strand  | -                   |
| Start    | 17812  | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o6.tm  | Method  | TBLASTX:Maize       |
| Start    | 11201  | End     | 11474               |
| GI       | none   | Score   | 56                  |
| Exons    | 11201..11287, 11297..11380, 11310..11384, 11367..11474, 11375..11473 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176                                    | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                                    | Strand  | -                   |
| Start    | 17812                                    | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o4.tw                | Method  | TBLASTX:Wheat       |
| Start    | 11546                                    | End     | 11933               |
| GI       | none                                     | Score   | 103                 |
| Exons    | 11546..11731, 11546..11932, 11622..11933 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22176 | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232 | Strand  | -                   |
| Start    | 17812 | End     | 18945               |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990715_14.9922.C9.o1.tm  | Method | TBLASTX:Maize |
| Start | 11576  | End    | 11938         |
| GI    | none   | Score  | 67            |
| Exons | 11576..11623, 11577..11624, 11595..11918, 11615..11938, 11628..11918 |        |               |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22176                      | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                      | Strand  | -                   |
| Start    | 17812                      | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o10.tw | Method  | TBLASTX:Wheat       |
| Start    | 11936                      | End     | 12235               |
| GI       | none                       | Score   | 130                 |
| Exons    | 11936..12076, 12101..12235 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22176                     | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                     | Strand  | -                   |
| Start    | 17812                     | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o5.tm | Method  | TBLASTX:Maize       |
| Start    | 12167                     | End     | 12421               |
| GI       | none                      | Score   | 193                 |
| Exons    | 12167..12421              |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22176                      | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                      | Strand  | -                   |
| Start    | 17812                      | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o5.tw  | Method  | TBLASTX:Wheat       |
| Start    | 12251                      | End     | 12673               |
| GI       | none                       | Score   | 267                 |
| Exons    | 12251..12673, 12261..12665 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22176                      | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                      | Strand  | -                   |
| Start    | 17812                      | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 12294                      | End     | 12682               |
| GI       | none                       | Score   | 147                 |
| Exons    | 12294..12674, 12296..12682 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176                                    | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                                    | Strand  | -                   |
| Start    | 17812                                    | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o8.tw                | Method  | TBLASTX:Wheat       |
| Start    | 12677                                    | End     | 12959               |
| GI       | none                                     | Score   | 70                  |
| Exons    | 12677..12958, 12689..12823, 12882..12959 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176  | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232  | Strand  | -                   |
| Start    | 17812  | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 12797  | End     | 13241               |
| GI       | none   | Score   | 89                  |
| Exons    | 12797..12823, 12821..12964, 12834..12965, 12980..13216, 12986..13240, 12987..13241 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22176 | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232 | Strand  | -                   |

|       |  |        |                 |
|-------|--|--------|-----------------|
| Start | 17812  | End    | 18945           |
| Name  | OJ990715_14.9922.C9.o1.ts                              | Method | TBLASTX:Soybean |
| Start | 12908  | End    | 13339           |
| GI    | none   | Score  | 46              |
| Exons | 12908..13339, 12942..13112, 12995..13276, 13149..13292 |        |                 |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176                                    | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                                    | Strand  | -                   |
| Start    | 17812                                    | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o3.tw                | Method  | TBLASTX:Wheat       |
| Start    | 12963                                    | End     | 13387               |
| GI       | none                                     | Score   | 296                 |
| Exons    | 12963..13343, 12963..13322, 12968..13387 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22176                                    | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                                    | Strand  | -                   |
| Start    | 17812                                    | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o2.tm                | Method  | TBLASTX:Maize       |
| Start    | 13472                                    | End     | 13828               |
| GI       | none                                     | Score   | 89                  |
| Exons    | 13472..13765, 13472..13828, 13482..13787 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22176                      | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                      | Strand  | -                   |
| Start    | 17812                      | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 13502                      | End     | 13958               |
| GI       | none                       | Score   | 274                 |
| Exons    | 13502..13957, 13503..13958 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22176                      | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                      | Strand  | -                   |
| Start    | 17812                      | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 13553                      | End     | 13918               |
| GI       | none                       | Score   | 132                 |
| Exons    | 13553..13687, 13694..13918 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22176                      | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                      | Strand  | -                   |
| Start    | 17812                      | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o7.tw  | Method  | TBLASTX:Wheat       |
| Start    | 15212                      | End     | 15614               |
| GI       | none                       | Score   | 117                 |
| Exons    | 15212..15613, 15345..15614 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22176                     | Seq. ID | OJ990715_14.9922.C9 |
| Gene No. | 46232                     | Strand  | -                   |
| Start    | 17812                     | End     | 18945               |
| Name     | OJ990715_14.9922.C9.o5.gs | Method  | GENSCAN             |
| Start    | 17812                     | End     | 18945               |
| GI       | none                      | Score   | .98                 |
| Exons    | 17812..18945              |         |                     |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22177 | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46233 | Strand  | +                    |
| Start    | 6109  | End     | 15312                |

|       |  |        |         |
|-------|--|--------|---------|
| Name  | OJ990715_14.9922.C10.o2.gs   | Method | GENSCAN |
| Start | 6109   | End    | 15312   |
| GI    | none   | Score  | .94     |
| Exons | 6109..6247, 6402..6535, 7678..7788, 7880..7963, 8046..8142, 8528..8579, 9653..9713, 10738..15312 |        |         |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22177   | Seq. ID | OJ990715_14.9922.C10 |
| Gene No.    | 46233   | Strand  | +                    |
| Start       | 6109  | End     | 15312                |
| Name        | OJ990715_14.9922.C10.o2.np                          | Method  | AAT/NAP              |
| Start       | 10735   | End     | 15309                |
| GI          | 4680179   | Score   | 6660                 |
| Exons       | 10735..15309  |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22177   | Seq. ID | OJ990715_14.9922.C10 |
| Gene No.    | 46234   | Strand  | -                    |
| Start       | 7110  | End     | 11081                |
| Name        | OJ990715_14.9922.C10.o1.np  | Method  | AAT/NAP              |
| Start       | 7110  | End     | 11081                |
| GI          | 5295955   | Score   | 856                  |
| Exons       | 7110..7751, 7868..8312, 8993..9107, 9650..9766, 10930..11081                  |         |                      |
| GI Descrip. | (AB026295) Similar to Epstein-Barr virus (EBV) genome.(V01555) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22177                                    | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46235                                    | Strand  |                      |
| Start    | 11004                                    | End     | 11544                |
| Name     | OJ990715_14.9922.C10.o7.tw               | Method  | TBLASTX:Wheat        |
| Start    | 11004                                    | End     | 11367                |
| GI       | none                                     | Score   | 297                  |
| Exons    | 11004..11108, 11008..11367, 11133..11366 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22177                      | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46235                      | Strand  |                      |
| Start    | 11004                      | End     | 11544                |
| Name     | OJ990715_14.9922.C10.o7.tm | Method  | TBLASTX:Maize        |
| Start    | 11248                      | End     | 11544                |
| GI       | none                       | Score   | 201                  |
| Exons    | 11248..11544, 11265..11435 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22177                      | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46236                      | Strand  |                      |
| Start    | 11890                      | End     | 12297                |
| Name     | OJ990715_14.9922.C10.o6.tm | Method  | TBLASTX:Maize        |
| Start    | 11890                      | End     | 12210                |
| GI       | none                       | Score   | 209                  |
| Exons    | 11890..12210               |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22177                                    | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46236                                    | Strand  |                      |
| Start    | 11890                                    | End     | 12297                |
| Name     | OJ990715_14.9922.C10.o8.tw               | Method  | TBLASTX:Wheat        |
| Start    | 11943                                    | End     | 12297                |
| GI       | none                                     | Score   | 262                  |
| Exons    | 11943..12038, 11944..12297, 12127..12261 |         |                      |

Seq. No. 22177  
 Gene No. 46237  
 Start 12468  
 Name OJ990715\_14.9922.C10.o4.tw  
 Start 12468  
 GI none  
 Exons 12468..12911, 12472..12954

Seq. ID OJ990715\_14.9922.C10  
 Strand  
 End 13341  
 Method TBLASTX:Wheat  
 End 12954  
 Score 546

Seq. No. 22177  
 Gene No. 46237  
 Start 12468  
 Name OJ990715\_14.9922.C10.o5.tm  
 Start 12481  
 GI none  
 Exons 12481..12771, 12483..12554, 12582..12773

Seq. ID OJ990715\_14.9922.C10  
 Strand  
 End 13341  
 Method TBLASTX:Maize  
 End 12773  
 Score 320

Seq. No. 22177  
 Gene No. 46237  
 Start 12468  
 Name OJ990715\_14.9922.C10.o4.ts  
 Start 12541  
 GI none  
 Exons 12541..12822, 12624..12821

Seq. ID OJ990715\_14.9922.C10  
 Strand  
 End 13341  
 Method TBLASTX:Soybean  
 End 12822  
 Score 183

Seq. No. 22177  
 Gene No. 46237  
 Start 12468  
 Name OJ990715\_14.9922.C10.o4.tm  
 Start 12841  
 GI none  
 Exons 12841..13020, 13006..13341

Seq. ID OJ990715\_14.9922.C10  
 Strand  
 End 13341  
 Method TBLASTX:Maize  
 End 13341  
 Score 157

Seq. No. 22177  
 Gene No. 46237  
 Start 12468  
 Name OJ990715\_14.9922.C10.o1.ts  
 Start 12895  
 GI none  
 Exons 12895..12927, 12895..12927, 12931..13290, 12934..13008, 12995..13072, 13047..13289

Seq. ID OJ990715\_14.9922.C10  
 Strand  
 End 13341  
 Method TBLASTX:Soybean  
 End 13290  
 Score 57

Seq. No. 22177  
 Gene No. 46237  
 Start 12468  
 Name OJ990715\_14.9922.C10.o5.tw  
 Start 13003  
 GI none  
 Exons 13003..13305, 13041..13304

Seq. ID OJ990715\_14.9922.C10  
 Strand  
 End 13341  
 Method TBLASTX:Wheat  
 End 13305  
 Score 391

Seq. No. 22177  
 Gene No. 46238  
 Start 13306  
 Name OJ990715\_14.9922.C10.o2.tw  
 Start 13306  
 GI none  
 Exons 13306..13815, 13338..13724

Seq. ID OJ990715\_14.9922.C10  
 Strand  
 End 13815  
 Method TBLASTX:Wheat  
 End 13815  
 Score 644

22464

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22177                      | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46238                      | Strand  |                      |
| Start    | 13306                      | End     | 13815                |
| Name     | OJ990715_14.9922.C10.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 13315                      | End     | 13557                |
| GI       | none                       | Score   | 197                  |
| Exons    | 13315..13557               |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22177                                    | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46238                                    | Strand  |                      |
| Start    | 13306                                    | End     | 13815                |
| Name     | OJ990715_14.9922.C10.o2.tm               | Method  | TBLASTX:Maize        |
| Start    | 13378                                    | End     | 13731                |
| GI       | none                                     | Score   | 483                  |
| Exons    | 13378..13731, 13380..13646, 13420..13716 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22177                                    | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46239                                    | Strand  |                      |
| Start    | 13819                                    | End     | 15285                |
| Name     | OJ990715_14.9922.C10.o3.tw               | Method  | TBLASTX:Wheat        |
| Start    | 13819                                    | End     | 14298                |
| GI       | none                                     | Score   | 589                  |
| Exons    | 13819..14298, 13837..14292, 13914..14297 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22177                                    | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46239                                    | Strand  |                      |
| Start    | 13819                                    | End     | 15285                |
| Name     | OJ990715_14.9922.C10.o1.tc               | Method  | TBLASTX:Cress        |
| Start    | 13996                                    | End     | 14322                |
| GI       | none                                     | Score   | 90                   |
| Exons    | 13996..14178, 14179..14322, 14244..14321 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22177                                    | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46239                                    | Strand  |                      |
| Start    | 13819                                    | End     | 15285                |
| Name     | OJ990715_14.9922.C10.o2.ts               | Method  | TBLASTX:Soybean      |
| Start    | 14086                                    | End     | 14346                |
| GI       | none                                     | Score   | 300                  |
| Exons    | 14086..14346, 14087..14293, 14244..14345 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22177  | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46239  | Strand  |                      |
| Start    | 13819  | End     | 15285                |
| Name     | OJ990715_14.9922.C10.o3.tm                             | Method  | TBLASTX:Maize        |
| Start    | 14144  | End     | 14436                |
| GI       | none   | Score   | 389                  |
| Exons    | 14144..14335, 14146..14436, 14215..14427, 14253..14432 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22177                      | Seq. ID | OJ990715_14.9922.C10 |
| Gene No. | 46239                      | Strand  |                      |
| Start    | 13819                      | End     | 15285                |
| Name     | OJ990715_14.9922.C10.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 14305                      | End     | 14931                |
| GI       | none                       | Score   | 672                  |
| Exons    | 14305..14931, 14361..14930 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22177 | Seq. ID | OJ990715_14.9922.C10 |
|----------|-------|---------|----------------------|

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 46239  | Strand  |                      |
| Start       | 13819  | End     | 15285                |
| Name        | OJ990715_14.9922.C10.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 14485  | End     | 15072                |
| GI          | none   | Score   | 226                  |
| Exons       | 14485..14646, 14493..14639, 14644..14742, 14644..14712, 14646..14741, 14760..15056, 14803..15072, 14811..15071 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22177  | Seq. ID | OJ990715_14.9922.C10 |
| Gene No.    | 46239  | Strand  |                      |
| Start       | 13819  | End     | 15285                |
| Name        | OJ990715_14.9922.C10.o6.tw   | Method  | TBLASTX:Wheat        |
| Start       | 14932  | End     | 15264                |
| GI          | none   | Score   | 361                  |
| Exons       | 14932..15264, 14959..15048   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22177  | Seq. ID | OJ990715_14.9922.C10 |
| Gene No.    | 46239  | Strand  |                      |
| Start       | 13819  | End     | 15285                |
| Name        | OJ990715_14.9922.C10.o8.tm   | Method  | TBLASTX:Maize        |
| Start       | 15073  | End     | 15285                |
| GI          | none   | Score   | 200                  |
| Exons       | 15073..15285   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22178  | Seq. ID | OJ990715_14.9922.C11 |
| Gene No.    | 46240  | Strand  | +                    |
| Start       | 355  | End     | 2006                 |
| Name        | OJ990715_14.9922.C11.o1.gs   | Method  | GENSCAN              |
| Start       | 355  | End     | 2006                 |
| GI          | none   | Score   | .76                  |
| Exons       | 355..434, 1817..2006   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22178  | Seq. ID | OJ990715_14.9922.C11 |
| Gene No.    | 46241  | Strand  | +                    |
| Start       | 4725   | End     | 8656                 |
| Name        | OJ990715_14.9922.C11.o3.gs   | Method  | GENSCAN              |
| Start       | 4725   | End     | 8648                 |
| GI          | none   | Score   | .48                  |
| Exons       | 4725..5002, 5262..5366, 5465..5964, 6750..6941, 7853..7899, 7904..8028, 8602..8648                             |         |                      |
|             |  |         |                      |
| Seq. No.    | 22178  | Seq. ID | OJ990715_14.9922.C11 |
| Gene No.    | 46241  | Strand  | +                    |
| Start       | 4725   | End     | 8656                 |
| Name        | OJ990715_14.9922.C11.o1.np   | Method  | AAT/NAP              |
| Start       | 6848   | End     | 8656                 |
| GI          | 6006359  | Score   | 77                   |
| Exons       | 6848..7005, 8602..8656   |         |                      |
| GI Descrip. | (AP000559) hypothetical protein [Oryza sativa]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22178  | Seq. ID | OJ990715_14.9922.C11 |
| Gene No.    | 46242  | Strand  | -                    |
| Start       | 2644   | End     | 3867                 |
| Name        | OJ990715_14.9922.C11.o2.gs   | Method  | GENSCAN              |
| Start       | 2644   | End     | 3867                 |
| GI          | none   | Score   | 1                    |
| Exons       | 2644..3867   |         |                      |



|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22179                            | Seq. ID | OJ990715_14.9922.C12 |
| Gene No. | 46243                            | Strand  | +                    |
| Start    | 641                              | End     | 2890                 |
| Name     | OJ990715_14.9922.C12.o1.gs       | Method  | GENSCAN              |
| Start    | 641                              | End     | 2890                 |
| GI       | none                             | Score   | .86                  |
| Exons    | 641..682, 1208..1387, 2498..2890 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22179                      | Seq. ID | OJ990715_14.9922.C12 |
| Gene No. | 46244                      | Strand  | -                    |
| Start    | 3574                       | End     | 7002                 |
| Name     | OJ990715_14.9922.C12.o2.gs | Method  | GENSCAN              |
| Start    | 3574                       | End     | 7002                 |
| GI       | none                       | Score   | .78                  |
| Exons    | 3574..4799, 6651..7002     |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22180   | Seq. ID | OJ990715_14.9922.C13 |
| Gene No. | 46245   | Strand  | +                    |
| Start    | 3406  | End     | 10263                |
| Name     | OJ990715_14.9922.C13.o2.gs  | Method  | GENSCAN              |
| Start    | 3406  | End     | 10263                |
| GI       | none  | Score   | .56                  |
| Exons    | 3406..3836, 3966..4585, 4811..4933, 5018..5185, 5357..5401, 5471..5737, 5949..6067, 6148..6265, 6290..6408, 6552..6812, 7010..7111, 7577..7748, 7812..8008, 8434..8754, 9392..9471, 9959..10263 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22180   | Seq. ID | OJ990715_14.9922.C13 |
| Gene No.    | 46245   | Strand  | +                    |
| Start       | 3406  | End     | 10263                |
| Name        | OJ990715_14.9922.C13.o1.np  | Method  | AAT/NAP              |
| Start       | 3517  | End     | 7762                 |
| GI          | 5441880   | Score   | 2130                 |
| Exons       | 3517..4528, 4973..5005, 5264..5632, 5681..6093, 6133..6447, 6552..6812, 7002..7236, 7543..7762  |         |                      |
| GI Descrip. | (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22180                              | Seq. ID | OJ990715_14.9922.C13 |
| Gene No. | 46245                              | Strand  | +                    |
| Start    | 3406                               | End     | 10263                |
| Name     | OJ990715_14.9922.C13.o1.tm         | Method  | TBLASTX:Maize        |
| Start    | 4084                               | End     | 4680                 |
| GI       | none                               | Score   | 358                  |
| Exons    | 4084..4551, 4089..4562, 4609..4680 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22180  | Seq. ID | OJ990715_14.9922.C13 |
| Gene No. | 46245  | Strand  | +                    |
| Start    | 3406   | End     | 10263                |
| Name     | OJ990715_14.9922.C13.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4378   | End     | 4755                 |
| GI       | none   | Score   | 178                  |
| Exons    | 4378..4527, 4380..4532, 4381..4557, 4581..4649, 4582..4755, 4604..4744 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22181   | Seq. ID | OJ990715_14.9922.C15 |
| Gene No.    | 46246   | Strand  | -                    |
| Start       | 1   | End     | 316                  |
| Name        | OJ990715_14.9922.C15.ol.gp  | Method  | AAT/GAP              |
| Start       | 1   | End     | 316                  |
| GI          | 342_1.R1084   | Score   | 583                  |
| Exons       | 1..316  |         |                      |
| GI Descrip. | '4574406/gb AAD24042.1  0.0e+00 (AF121139) RIM2 protein [Oryza sativa]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22181                                  | Seq. ID | OJ990715_14.9922.C15 |
| Gene No.    | 46246                                  | Strand  | -                    |
| Start       | 1                                      | End     | 316                  |
| Name        | OJ990715_14.9922.C15.ol.np             | Method  | AAT/NAP              |
| Start       | 1                                      | End     | 316                  |
| GI          | 6742729                                | Score   | 517                  |
| Exons       | 1..316                                 |         |                      |
| GI Descrip. | (AF121139) RIM2 protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22181                      | Seq. ID | OJ990715_14.9922.C15 |
| Gene No. | 46246                      | Strand  | -                    |
| Start    | 1                          | End     | 316                  |
| Name     | OJ990715_14.9922.C15.ol.gs | Method  | GENSCAN              |
| Start    | 15                         | End     | 201                  |
| GI       | none                       | Score   | .64                  |
| Exons    | 15..201                    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22182                      | Seq. ID | OJ990715_14.9922.C16 |
| Gene No. | 46247                      | Strand  | -                    |
| Start    | 142                        | End     | 385                  |
| Name     | OJ990715_14.9922.C16.ol.gs | Method  | GENSCAN              |
| Start    | 142                        | End     | 252                  |
| GI       | none                       | Score   | .67                  |
| Exons    | 142..252                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22182  | Seq. ID | OJ990715_14.9922.C16 |
| Gene No.    | 46247  | Strand  | -                    |
| Start       | 142  | End     | 385                  |
| Name        | OJ990715_14.9922.C16.ol.np                     | Method  | AAT/NAP              |
| Start       | 147  | End     | 385                  |
| GI          | 6907088  | Score   | 331                  |
| Exons       | 147..385                                       |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22183   | Seq. ID | OJ990505_01.9924.C1 |
| Gene No.    | 46248   | Strand  | -                   |
| Start       | 1   | End     | 476                 |
| Name        | OJ990505_01.9924.C1.ol.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 418                 |
| GI          | 6069670   | Score   | 417                 |
| Exons       | 1..89, 156..418   |         |                     |
| GI Descrip. | (AP000616) ESTs C73538(E4487), AU078663(E4437) correspond to a region of the predicted gene.; similar to DWARF3 (U32579) [Oryza sativa] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22183 | Seq. ID | OJ990505_01.9924.C1 |
| Gene No. | 46248 | Strand  | -                   |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 1  | End    | 476     |
| Name        | OJ990505_01.9924.C1.ol.gp  | Method | AAT/GAP |
| Start       | 153  | End    | 476     |
| GI          | uC-osflM202066a01b1  | Score  | 594     |
| Exons       | 153..476   |        |         |
| GI Descrip. | '6069670/dbj BAA85446.1  2.0e-37 (AP000616) ESTs<br>C73538(E4487),AU078663(E4437) correspond to a region of the<br>predicted gene.; similar to DWARF3 (U32579) [Oryza sativa]' |        |         |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22183                     | Seq. ID | OJ990505_01.9924.C1 |
| Gene No. | 46248                     | Strand  | -                   |
| Start    | 1                         | End     | 476                 |
| Name     | OJ990505_01.9924.C1.ol.gs | Method  | GENSCAN             |
| Start    | 156                       | End     | 418                 |
| GI       | none                      | Score   | .65                 |
| Exons    | 156..418                  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22184  | Seq. ID | OJ990505_01.9924.C2 |
| Gene No. | 46249  | Strand  | +                   |
| Start    | 147  | End     | 834                 |
| Name     | OJ990505_01.9924.C2.ol.ts                                  | Method  | TBLASTX:Soybean     |
| Start    | 144  | End     | 773                 |
| GI       | none   | Score   | 71                  |
| Exons    | 144..200, 146..199, 165..749, 191..664, 621..773, 633..755 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22184  | Seq. ID | OJ990505_01.9924.C2 |
| Gene No.    | 46249  | Strand  | +                   |
| Start       | 147  | End     | 834                 |
| Name        | OJ990505_01.9924.C2.ol.np  | Method  | AAT/NAP             |
| Start       | 147  | End     | 834                 |
| GI          | 6714431  | Score   | 804                 |
| Exons       | 147..834   |         |                     |
| GI Descrip. | (AC012328) putative cellulose synthase catalytic subunit<br>[Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22184                     | Seq. ID | OJ990505_01.9924.C2 |
| Gene No. | 46249                     | Strand  | +                   |
| Start    | 147                       | End     | 834                 |
| Name     | OJ990505_01.9924.C2.ol.gs | Method  | GENSCAN             |
| Start    | 150                       | End     | 680                 |
| GI       | none                      | Score   | .76                 |
| Exons    | 150..680                  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22184  | Seq. ID | OJ990505_01.9924.C2 |
| Gene No. | 46249  | Strand  | +                   |
| Start    | 147  | End     | 834                 |
| Name     | OJ990505_01.9924.C2.ol.tw                        | Method  | TBLASTX:Wheat       |
| Start    | 223  | End     | 584                 |
| GI       | none   | Score   | 373                 |
| Exons    | 223..582, 228..584, 228..491, 229..498, 230..583 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22184                     | Seq. ID | OJ990505_01.9924.C2 |
| Gene No. | 46249                     | Strand  | +                   |
| Start    | 147                       | End     | 834                 |
| Name     | OJ990505_01.9924.C2.ol.tc | Method  | TBLASTX:Cress       |
| Start    | 233                       | End     | 671                 |
| GI       | none                      | Score   | 275                 |

Exons 233..430, 240..431, 423..671, 452..625

Seq. No. 22184 Seq. ID OJ990505\_01.9924.C2  
Gene No. 46249 Strand +  
Start 147 End 834  
Name OJ990505\_01.9924.C2.o1.tm Method TBLASTX:Maize  
Start 240 End 725  
GI none Score 275  
Exons 240..431, 241..447, 242..430, 431..625, 438..671, 651..725

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46250 Strand +  
Start 40 End 3311  
Name OJ990505\_01.9924.C3.o1.gp Method AAT/GAP  
Start 40 End 3311  
GI 23462\_1.R1084 Score 2455  
Exons 40..346, 1066..1133, 1313..1468, 2312..2503, 2585..2758, 2889..3311

GI Descrip. '481815/pir||S39502 5.0e-56 vegetative storage protein - western balsam poplar x cottonwood >gi\_309839 (L20233) vegetative storage protein [Populus trichocarpa x Populus deltoides]'

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46250 Strand +  
Start 40 End 3311  
Name OJ990505\_01.9924.C3.o1.gs Method GENSCAN  
Start 103 End 3080  
GI none Score .9  
Exons 103..207, 1313..1468, 2312..2503, 2585..2758, 2889..3080

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46250 Strand +  
Start 40 End 3311  
Name OJ990505\_01.9924.C3.o1.np Method AAT/NAP  
Start 103 End 3044  
GI 5051776 Score 372  
Exons 103..350, 1088..1133, 1313..1485, 2323..2509, 2585..2758, 2889..3044

GI Descrip. (AL078637) putative protein [Arabidopsis thaliana]

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46251 Strand +  
Start 8949 End 12827  
Name OJ990505\_01.9924.C3.o3.gs Method GENSCAN  
Start 8949 End 12827  
GI none Score .53  
Exons 8949..8971, 9347..9508, 12547..12591, 12749..12827

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46252 Strand +  
Start 17578 End 21714  
Name OJ990505\_01.9924.C3.o5.gs Method GENSCAN  
Start 17578 End 21714  
GI none Score .98  
Exons 17578..18524, 18840..19647, 19957..21714

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3

|             |   |        |         |
|-------------|---|--------|---------|
| Gene No.    | 46252   | Strand | +       |
| Start       | 17578   | End    | 21714   |
| Name        | OJ990505_01.9924.C3.o3.np   | Method | AAT/NAP |
| Start       | 17602   | End    | 21711   |
| GI          | 6714431   | Score  | 4750    |
| Exons       | 17602..17778, 17806..18524, 18840..19647, 19957..21711                          |        |         |
| GI Descrip. | (AC012328) putative cellulose synthase catalytic subunit [Arabidopsis thaliana] |        |         |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22185  | Seq. ID | OJ990505_01.9924.C3 |
| Gene No.    | 46252  | Strand  | +                   |
| Start       | 17578  | End     | 21714               |
| Name        | OJ990505_01.9924.C3.o3.gp  | Method  | AAT/GAP             |
| Start       | 20860  | End     | 21195               |
| GI          | 2800379  | Score   | 612                 |
| Exons       | 20860..21195   |         |                     |
| GI Descrip. | 6056428/gb AAF02892.1 AC009525_26 9.0e-46 (AC009525) Very similar to cellulose synthase catalytic subunit [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22185  | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46253  | Strand  | -                   |
| Start    | 3835   | End     | 7222                |
| Name     | OJ990505_01.9924.C3.o8.tm  | Method  | TBLASTX:Maize       |
| Start    | 211  | End     | 1410                |
| GI       | none   | Score   | 192                 |
| Exons    | 211..348, 221..346, 222..347, 1053..1136, 1064..1135, 1310..1408, 1312..1410 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22185  | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46253  | Strand  | -                   |
| Start    | 3835   | End     | 7222                |
| Name     | OJ990505_01.9924.C3.o6.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 2311   | End     | 2609                |
| GI       | none   | Score   | 89                  |
| Exons    | 2311..2379, 2312..2380, 2374..2505, 2375..2533, 2568..2609 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22185                     | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46253                     | Strand  | -                   |
| Start    | 3835                      | End     | 7222                |
| Name     | OJ990505_01.9924.C3.o6.ts | Method  | TBLASTX:Soybean     |
| Start    | 3820                      | End     | 4089                |
| GI       | none                      | Score   | 176                 |
| Exons    | 3820..4089, 3827..4042    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22185                     | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46253                     | Strand  | -                   |
| Start    | 3835                      | End     | 7222                |
| Name     | OJ990505_01.9924.C3.o5.tm | Method  | TBLASTX:Maize       |
| Start    | 3823                      | End     | 4089                |
| GI       | none                      | Score   | 168                 |
| Exons    | 3823..4089, 3833..4045    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22185                     | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46253                     | Strand  | -                   |
| Start    | 3835                      | End     | 7222                |
| Name     | OJ990505_01.9924.C3.o2.gs | Method  | GENSCAN             |

Start 3835  
GI none  
Exons 3835..6039

End 6039  
Score .97

Seq. No. 22185  
Gene No. 46253  
Start 3835  
Name OJ990505\_01.9924.C3.o3.tc  
Start 3835  
GI none  
Exons 3835..4083, 3836..4042, 4087..4335, 4229..4300

Seq. ID OJ990505\_01.9924.C3  
Strand -  
End 7222  
Method TBLASTX:Cress  
End 4335  
Score 106

Seq. No. 22185  
Gene No. 46253  
Start 3835  
Name OJ990505\_01.9924.C3.o2.np  
Start 3838  
GI 5725434  
Exons 3838..5824, 7133..7222  
GI Descrip. (AL109787) putative protein [Arabidopsis thaliana]

Seq. ID OJ990505\_01.9924.C3  
Strand -  
End 7222  
Method AAT/NAP  
End 7222  
Score 1378

Seq. No. 22185  
Gene No. 46253  
Start 3835  
Name OJ990505\_01.9924.C3.o3.tm  
Start 4093  
GI none  
Exons 4093..4968, 4571..4831, 4585..4764, 4630..4965, 4640..4834, 4657..4887, 4658..4957, 4924..5253, 4939..5109, 4945..5235, 4951..5175, 4970..5236, 4978..5364, 4988..5056, 5081..5230, 5170..5478, 5248..5583, 5278..5478, 5536..5733, 5569..5874, 5587..5859, 5596..5664, 5654..5875

Seq. ID OJ990505\_01.9924.C3  
Strand -  
End 7222  
Method TBLASTX:Maize  
End 5875  
Score 107

Seq. No. 22185  
Gene No. 46253  
Start 3835  
Name OJ990505\_01.9924.C3.o5.ts  
Start 4135  
GI none  
Exons 4135..4653, 4229..4426

Seq. ID OJ990505\_01.9924.C3  
Strand -  
End 7222  
Method TBLASTX:Soybean  
End 4653  
Score 95

Seq. No. 22185  
Gene No. 46253  
Start 3835  
Name OJ990505\_01.9924.C3.o2.gp  
Start 4311  
GI LIB3432-051-P1-K1-C7  
Exons 4311..4630  
GI Descrip. '6006885/gb|AAF00660.1|AC008153\_12 2.0e-29 (AC008153) hypothetical protein [Arabidopsis thaliana]'

Seq. ID OJ990505\_01.9924.C3  
Strand -  
End 7222  
Method AAT/GAP  
End 4630  
Score 607

Seq. No. 22185  
Gene No. 46253  
Start 3835  
Name OJ990505\_01.9924.C3.o4.tc  
Start 4363  
GI none

Seq. ID OJ990505\_01.9924.C3  
Strand -  
End 7222  
Method TBLASTX:Cress  
End 5859  
Score 71

Exons 4363..4488, 4486..5064, 4501..4746, 4571..5050, 4612..4770,  
4924..5355, 5188..5478, 5578..5859, 5584..5673

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46253 Strand -  
Start 3835 End 7222  
Name OJ990505\_01.9924.C3.o4.tw Method TBLASTX:Wheat  
Start 4528 End 5904  
GI none Score 55  
Exons 4528..5001, 4531..4656, 4571..4981, 4588..4707, 4924..5310,  
5191..5475, 5291..5455, 5560..5904

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46253 Strand -  
Start 3835 End 7222  
Name OJ990505\_01.9924.C3.o8.ts Method TBLASTX:Soybean  
Start 4654 End 5904  
GI none Score 69  
Exons 4654..4812, 4655..4813, 4732..5115, 4880..5086, 5035..5418,  
5263..5415, 5306..5416, 5620..5724, 5644..5904

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46254 Strand -  
Start 11700 End 12186  
Name OJ990505\_01.9924.C3.o7.tm Method TBLASTX:Maize  
Start 11700 End 12186  
GI none Score 183  
Exons 11700..11969, 11711..11878, 12049..12084, 12118..12186

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46255 Strand -  
Start 17692 End 18105  
Name OJ990505\_01.9924.C3.o3.ts Method TBLASTX:Soybean  
Start 17692 End 18105  
GI none Score 120  
Exons 17692..17790, 17694..17744, 17805..18104, 17806..18105

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46256 Strand -  
Start 18265 End 18903  
Name OJ990505\_01.9924.C3.o7.ts Method TBLASTX:Soybean  
Start 18265 End 18903  
GI none Score 182  
Exons 18265..18396, 18291..18380, 18442..18525, 18444..18521,  
18859..18903

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46256 Strand -  
Start 18265 End 18903  
Name OJ990505\_01.9924.C3.o5.tc Method TBLASTX:Cress  
Start 18292 End 18525  
GI none Score 150  
Exons 18292..18381, 18298..18372, 18303..18380, 18445..18525

Seq. No. 22185 Seq. ID OJ990505\_01.9924.C3  
Gene No. 46257 Strand -  
Start 18820 End 21723

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990505_01.9924.C3.o2.tc  | Method | TBLASTX:Cress |
| Start | 18820  | End    | 21669         |
| GI    | none   | Score  | 197           |
| Exons | 18820..19044, 19074..19361, 19075..19437, 19093..19377,<br>19115..19381, 19564..19590, 19627..19650, 20040..20237,<br>20047..20238, 20230..20349, 21420..21668, 21421..21669 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22185                                    | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257                                    | Strand  |                     |
| Start    | 18820                                    | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o2.tm                | Method  | TBLASTX:Maize       |
| Start    | 18906                                    | End     | 19650               |
| GI       | none                                     | Score   | 105                 |
| Exons    | 18906..18995, 18906..19649, 18907..19650 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22185   | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257   | Strand  |                     |
| Start    | 18820   | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o2.ts   | Method  | TBLASTX:Soybean     |
| Start    | 19099   | End     | 20064               |
| GI       | none  | Score   | 269                 |
| Exons    | 19099..19263, 19101..19262, 19258..19650, 19263..19505,<br>19264..19650, 19951..20007, 20029..20064 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22185                                    | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257                                    | Strand  |                     |
| Start    | 18820                                    | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o6.tw                | Method  | TBLASTX:Wheat       |
| Start    | 19248                                    | End     | 19590               |
| GI       | none                                     | Score   | 219                 |
| Exons    | 19248..19343, 19249..19437, 19564..19590 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22185   | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257   | Strand  |                     |
| Start    | 18820   | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o2.tw   | Method  | TBLASTX:Wheat       |
| Start    | 20030   | End     | 20391               |
| GI       | none  | Score   | 373                 |
| Exons    | 20030..20389, 20035..20391, 20035..20298, 20036..20305,<br>20037..20390 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22185   | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257   | Strand  |                     |
| Start    | 18820   | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o4.tm   | Method  | TBLASTX:Maize       |
| Start    | 20040   | End     | 20436               |
| GI       | none  | Score   | 271                 |
| Exons    | 20040..20237, 20047..20238, 20047..20238, 20244..20432,<br>20245..20436 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22185   | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257   | Strand  |                     |
| Start    | 18820   | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o4.ts                               | Method  | TBLASTX:Soybean     |
| Start    | 20064   | End     | 20694               |
| GI       | none  | Score   | 448                 |
| Exons    | 20064..20324, 20065..20325, 20446..20694, 20448..20471, |         |                     |



20500..20691, 20559..20693

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22185  | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257  | Strand  |                     |
| Start    | 18820  | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 20326  | End     | 21669               |
| GI       | none   | Score   | 111                 |
| Exons    | 20326..20445, 20694..20972, 20695..20982, 20737..20982,<br>21007..21363, 21051..21125, 21196..21321, 21198..21335,<br>21370..21669, 21388..21420, 21390..21668 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22185  | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257  | Strand  |                     |
| Start    | 18820  | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 20352  | End     | 21419               |
| GI       | none   | Score   | 171                 |
| Exons    | 20352..20444, 20359..20493, 20509..20982, 20512..21006,<br>20559..21005, 20967..21077, 20992..21075, 21078..21341,<br>21079..21417, 21079..21417, 21081..21419 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22185                      | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257                      | Strand  |                     |
| Start    | 18820                      | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 20442                      | End     | 21723               |
| GI       | none                       | Score   | 2128                |
| Exons    | 20442..21722, 20443..21723 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22185                                    | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257                                    | Strand  |                     |
| Start    | 18820                                    | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o3.tw                | Method  | TBLASTX:Wheat       |
| Start    | 20545                                    | End     | 20909               |
| GI       | none                                     | Score   | 482                 |
| Exons    | 20545..20904, 20562..20909, 20562..20903 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22185                                    | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257                                    | Strand  |                     |
| Start    | 18820                                    | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o1.tw                | Method  | TBLASTX:Wheat       |
| Start    | 21051                                    | End     | 21437               |
| GI       | none                                     | Score   | 269                 |
| Exons    | 21051..21410, 21051..21437, 21052..21435 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22185  | Seq. ID | OJ990505_01.9924.C3 |
| Gene No. | 46257  | Strand  |                     |
| Start    | 18820  | End     | 21723               |
| Name     | OJ990505_01.9924.C3.o5.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 21437  | End     | 21585               |
| GI       | none   | Score   | 160                 |
| Exons    | 21437..21580, 21438..21581, 21438..21581, 21439..21585 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22186 | Seq. ID | OJ990505_01.9924.C4 |
| Gene No. | 46258 | Strand  | -                   |
| Start    | 1244  | End     | 2058                |

Name OJ990505\_01.9924.C4.o1.gs  
 Start 1244  
 GI none  
 Exons 1244..2050

Method GENSCAN  
 End 2050  
 Score .57

Seq. No. 22186  
 Gene No. 46258  
 Start 1244  
 Name OJ990505\_01.9924.C4.o1.np  
 Start 1256  
 GI 3608134  
 Exons 1256..2058  
 GI Descrip. (AC005314) putative DnaJ protein [Arabidopsis thaliana]

Seq. ID OJ990505\_01.9924.C4  
 Strand -  
 End 2058  
 Method AAT/NAP  
 End 2058  
 Score 386

Seq. No. 22186  
 Gene No. 46258  
 Start 1244  
 Name OJ990505\_01.9924.C4.o1.tm  
 Start 1316  
 GI none  
 Exons 1316..1420, 1427..1528, 1559..1693, 1560..1694, 1724..1900

Seq. ID OJ990505\_01.9924.C4  
 Strand -  
 End 2058  
 Method TBLASTX:Maize  
 End 1900  
 Score 67

Seq. No. 22186  
 Gene No. 46258  
 Start 1244  
 Name OJ990505\_01.9924.C4.o1.tw  
 Start 1592  
 GI none  
 Exons 1592..1693, 1629..1709, 1724..1900, 1771..1809, 1791..1859

Seq. ID OJ990505\_01.9924.C4  
 Strand -  
 End 2058  
 Method TBLASTX:Wheat  
 End 1900  
 Score 62

Seq. No. 22186  
 Gene No. 46258  
 Start 1244  
 Name OJ990505\_01.9924.C4.o1.ts  
 Start 1670  
 GI none  
 Exons 1670..1696, 1671..1709, 1709..1906, 1725..1844

Seq. ID OJ990505\_01.9924.C4  
 Strand -  
 End 2058  
 Method TBLASTX:Soybean  
 End 1906  
 Score 36

Seq. No. 22187  
 Gene No. 46259  
 Start 1  
 Name OJ990505\_01.9924.C5.o2.np  
 Start 1  
 GI 6007553  
 Exons 1..79, 6656..7019, 7770..7977, 8685..8881, 9281..9657, 10208..10318  
 GI Descrip. (AF183408) McyA [Microcystis aeruginosa]

Seq. ID OJ990505\_01.9924.C5  
 Strand -  
 End 10318  
 Method AAT/NAP  
 End 10318  
 Score 240

Seq. No. 22187  
 Gene No. 46259  
 Start 1  
 Name OJ990505\_01.9924.C5.o1.gs  
 Start 204  
 GI none  
 Exons 204..254, 338..421, 752..845, 1096..1252, 1329..1432, 2216..2260, 2887..2951, 3210..3294, 3480..3539, 4112..4155, 5459..6185, 6331..7041, 7777..7977, 8685..8881, 9281..9697,

Seq. ID OJ990505\_01.9924.C5  
 Strand -  
 End 10318  
 Method GENSCAN  
 End 10029  
 Score .73

9783..10029

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22187  | Seq. ID | OJ990505_01.9924.C5 |
| Gene No.    | 46259  | Strand  | -                   |
| Start       | 1  | End     | 10318               |
| Name        | OJ990505_01.9924.C5.o1.ts                                  | Method  | TBLASTX:Soybean     |
| Start       | 1039   | End     | 1447                |
| GI          | 5688457  | Score   | 125                 |
| Exons       | 1039..1152, 1049..1162, 1183..1254, 1346..1447, 1365..1427 |         |                     |
| GI Descrip. | -  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22187  | Seq. ID | OJ990505_01.9924.C5 |
| Gene No. | 46259  | Strand  | -                   |
| Start    | 1  | End     | 10318               |
| Name     | OJ990505_01.9924.C5.o5.tm  | Method  | TBLASTX:Maize       |
| Start    | 1189   | End     | 2451                |
| GI       | none   | Score   | 91                  |
| Exons    | 1189..1254, 1190..1255, 1195..1257, 1314..1454, 1325..1447, 2130..2153, 2198..2263, 2199..2261, 2213..2263, 2373..2447, 2374..2451, 2374..2445 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22187  | Seq. ID | OJ990505_01.9924.C5 |
| Gene No. | 46259  | Strand  | -                   |
| Start    | 1  | End     | 10318               |
| Name     | OJ990505_01.9924.C5.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 3217   | End     | 5048                |
| GI       | none   | Score   | 85                  |
| Exons    | 3217..3291, 3474..3542, 3608..3727, 3616..3726, 3629..3727, 4933..5043, 4941..5048, 4945..5043 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22187  | Seq. ID | OJ990505_01.9924.C5 |
| Gene No. | 46259  | Strand  | -                   |
| Start    | 1  | End     | 10318               |
| Name     | OJ990505_01.9924.C5.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 3641   | End     | 5728                |
| GI       | none   | Score   | 112                 |
| Exons    | 3641..3727, 3643..3726, 4102..4158, 4109..4168, 4109..4156, 4110..4157, 4111..4158, 4938..5042, 4944..5036, 4945..5043, 5109..5189, 5110..5190, 5456..5716, 5460..5717, 5461..5721, 5516..5728 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22187                              | Seq. ID | OJ990505_01.9924.C5 |
| Gene No. | 46259                              | Strand  | -                   |
| Start    | 1                                  | End     | 10318               |
| Name     | OJ990505_01.9924.C5.o2.tm          | Method  | TBLASTX:Maize       |
| Start    | 5901                               | End     | 6184                |
| GI       | none                               | Score   | 176                 |
| Exons    | 5901..6182, 5946..6182, 6023..6184 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22187  | Seq. ID | OJ990505_01.9924.C5 |
| Gene No. | 46259  | Strand  | -                   |
| Start    | 1  | End     | 10318               |
| Name     | OJ990505_01.9924.C5.o1.np  | Method  | AAT/NAP             |
| Start    | 6084   | End     | 10318               |
| GI       | 1075778  | Score   | 219                 |
| Exons    | 6084..6176, 6331..6545, 6597..7041, 7777..7977, 8685..8780, 9177..9392, 9423..9664, 10279..10318 |         |                     |

22477

GI Descrip. gramicidin S synthase 2 - *Bacillus brevis*  
gi|511490|dbj|BAA06146| (D29676) gramicidin S synthetase 2  
[*Brevibacillus brevis*]

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22187  | Seq. ID | OJ990505_01.9924.C5 |
| Gene No. | 46259  | Strand  | -                   |
| Start    | 1  | End     | 10318               |
| Name     | OJ990505_01.9924.C5.o3.tm                      | Method  | TBLASTX:Maize       |
| Start    | 6835   | End     | 7968                |
| GI       | none   | Score   | 207                 |
| Exons    | 6835..7044, 6836..7063, 7774..7968, 7775..7966 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22187  | Seq. ID | OJ990505_01.9924.C5 |
| Gene No. | 46259  | Strand  | -                   |
| Start    | 1  | End     | 10318               |
| Name     | OJ990505_01.9924.C5.o4.tm                      | Method  | TBLASTX:Maize       |
| Start    | 9493   | End     | 9671                |
| GI       | none   | Score   | 183                 |
| Exons    | 9493..9627, 9498..9644, 9504..9671, 9509..9658 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22188   | Seq. ID | OJ990505_01.9924.C7 |
| Gene No.    | 46260   | Strand  | +                   |
| Start       | 760   | End     | 4699                |
| Name        | OJ990505_01.9924.C7.o1.np   | Method  | AAT/NAP             |
| Start       | 760   | End     | 4699                |
| GI          | 6069670   | Score   | 1971                |
| Exons       | 760..798, 2233..3024, 3133..3222, 3728..3806, 3984..4090, 4216..4337, 4600..4699  |         |                     |
| GI Descrip. | (AP000616) ESTs C73538(E4487),AU078663(E4437) correspond to a region of the predicted gene.; similar to DWARF3 (U32579) [ <i>Oryza sativa</i> ] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22188  | Seq. ID | OJ990505_01.9924.C7 |
| Gene No. | 46260  | Strand  | +                   |
| Start    | 760  | End     | 4699                |
| Name     | OJ990505_01.9924.C7.o1.gs                      | Method  | GENSCAN             |
| Start    | 2257   | End     | 3912                |
| GI       | none   | Score   | .98                 |
| Exons    | 2257..3024, 3133..3222, 3728..3806, 3896..3912 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22188  | Seq. ID | OJ990505_01.9924.C7 |
| Gene No.    | 46260  | Strand  | +                   |
| Start       | 760  | End     | 4699                |
| Name        | OJ990505_01.9924.C7.o1.gp  | Method  | AAT/GAP             |
| Start       | 2274   | End     | 2359                |
| GI          | uC-osf1M202066a01b1  | Score   | 134                 |
| Exons       | 2274..2359   |         |                     |
| GI Descrip. | '6069670/dbj BAA85446.1  2.0e-37 (AP000616) ESTs C73538(E4487),AU078663(E4437) correspond to a region of the predicted gene.; similar to DWARF3 (U32579) [ <i>Oryza sativa</i> ] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22188                     | Seq. ID | OJ990505_01.9924.C7 |
| Gene No. | 46261                     | Strand  | +                   |
| Start    | 4762                      | End     | 5046                |
| Name     | OJ990505_01.9924.C7.o2.gp | Method  | AAT/GAP             |
| Start    | 4762                      | End     | 5046                |
| GI       | 103159_1.R1084            | Score   | 544                 |

Exons 4762..5046  
GI Descrip. '6069643/dbj|AP000616.1|AP000616 1.0e-145 Oryza sativa genomic DNA, chromosome 6, clone:P0514G12'

Seq. No. 22188 Seq. ID OJ990505\_01.9924.C7  
Gene No. 46262 Strand +  
Start 6757 End 10499  
Name OJ990505\_01.9924.C7.o3.gp Method AAT/GAP  
Start 6315 End 10499  
GI 140 1.R1084 Score 2519  
Exons 6315..6480, 6750..6987, 7583..7750, 8730..8823, 9592..9747, 9976..10499  
GI Descrip. '6069671/dbj|BAA85447.1| 0.0e+00 (AP000616) EST C72179(E1153) corresponds to a region of the predicted gene.; similar to Arabidopsis thaliana chromosome II BAC T4C15; hypothetical protein (AC004667) [Oryza sativa]'

Seq. No. 22188 Seq. ID OJ990505\_01.9924.C7  
Gene No. 46262 Strand +  
Start 6757 End 10499  
Name OJ990505\_01.9924.C7.o2.gs Method GENSCAN  
Start 6757 End 10369  
GI none Score .79  
Exons 6757..6987, 7583..7750, 8730..8823, 9245..9343, 9592..9747, 9976..10221, 10260..10369

Seq. No. 22188 Seq. ID OJ990505\_01.9924.C7  
Gene No. 46262 Strand +  
Start 6757 End 10499  
Name OJ990505\_01.9924.C7.o2.np Method AAT/NAP  
Start 6757 End 10366  
GI 6069671 Score 1796  
Exons 6757..6987, 7583..7750, 8730..8823, 9245..9343, 9592..9747, 9976..10221, 10260..10366  
GI Descrip. (AP000616) EST C72179(E1153) corresponds to a region of the predicted gene.; similar to Arabidopsis thaliana chromosome II BAC T4C15; hypothetical protein (AC004667) [Oryza sativa]

Seq. No. 22188 Seq. ID OJ990505\_01.9924.C7  
Gene No. 46263 Strand +  
Start 12259 End 12570  
Name OJ990505\_01.9924.C7.o3.gs Method GENSCAN  
Start 12259 End 12570  
GI none Score .75  
Exons 12259..12570

Seq. No. 22188 Seq. ID OJ990505\_01.9924.C7  
Gene No. 46263 Strand +  
Start 12259 End 12570  
Name OJ990505\_01.9924.C7.o3.np Method AAT/NAP  
Start 12259 End 12567  
GI 6069672 - Score 519  
Exons 12259..12567  
GI Descrip. (AP000616) hypothetical protein [Oryza sativa]

Seq. No. 22188 Seq. ID OJ990505\_01.9924.C7  
Gene No. 46264 Strand +

|       |  |        |         |
|-------|--|--------|---------|
| Start | 15012  | End    | 19462   |
| Name  | OJ990505_01.9924.C7.o4.gs  | Method | GENSCAN |
| Start | 15012  | End    | 19462   |
| GI    | none   | Score  | .51     |
| Exons | 15012..15666, 15799..16475, 16559..17019, 17625..17716, 18468..18561, 19402..19462 |        |         |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22188   | Seq. ID | OJ990505_01.9924.C7 |
| Gene No.    | 46264   | Strand  | +                   |
| Start       | 15012   | End     | 19462               |
| Name        | OJ990505_01.9924.C7.o4.np   | Method  | AAT/NAP             |
| Start       | 15828   | End     | 16094               |
| GI          | 6503308   | Score   | 75                  |
| Exons       | 15828..16094  |         |                     |
| GI Descrip. | (AC011713) Contains PF 00646 F-box domain. ESTs gb AA586135, gb Z26675, gb AI993239 and gb AA585907 come from this gene. [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22188  | Seq. ID | OJ990505_01.9924.C7 |
| Gene No. | 46265  | Strand  | -                   |
| Start    | 20136  | End     | 21043               |
| Name     | OJ990505_01.9924.C7.o1.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 2242   | End     | 2679                |
| GI       | none   | Score   | 295                 |
| Exons    | 2242..2565, 2271..2549, 2575..2679, 2575..2679 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22188  | Seq. ID | OJ990505_01.9924.C7 |
| Gene No. | 46265  | Strand  | -                   |
| Start    | 20136  | End     | 21043               |
| Name     | OJ990505_01.9924.C7.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 2683   | End     | 4684                |
| GI       | none   | Score   | 94                  |
| Exons    | 2683..2799, 2848..2913, 2890..3024, 2931..3020, 3130..3225, 3132..3215, 3725..3808, 3974..4087, 4228..4338, 4230..4328, 4598..4684 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22188  | Seq. ID | OJ990505_01.9924.C7 |
| Gene No. | 46265  | Strand  | -                   |
| Start    | 20136  | End     | 21043               |
| Name     | OJ990505_01.9924.C7.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 3752   | End     | 4344                |
| GI       | none   | Score   | 84                  |
| Exons    | 3752..3808, 3982..4089, 3983..4090, 3997..4092, 3999..4091, 4209..4343, 4210..4344, 4224..4343 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22188  | Seq. ID | OJ990505_01.9924.C7 |
| Gene No. | 46265  | Strand  | -                   |
| Start    | 20136  | End     | 21043               |
| Name     | OJ990505_01.9924.C7.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 6749   | End     | 9746                |
| GI       | none   | Score   | 308                 |
| Exons    | 6749..6781, 6805..6990, 6811..6996, 7580..7750, 7580..7750, 7582..7752, 8724..8822, 8727..8825, 9588..9746, 9590..9745, 9591..9746 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22188 | Seq. ID | OJ990505_01.9924.C7 |
| Gene No. | 46265 | Strand  | -                   |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 20136  | End    | 21043         |
| Name  | OJ990505_01.9924.C7.o1.tc                                  | Method | TBLASTX:Cress |
| Start | 6811   | End    | 7714          |
| GI    | none   | Score  | 214           |
| Exons | 6811..6990, 6811..6990, 7579..7683, 7580..7714, 7580..7711 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22188  | Seq. ID | OJ990505_01.9924.C7 |
| Gene No. | 46265  | Strand  | -                   |
| Start    | 20136  | End     | 21043               |
| Name     | OJ990505_01.9924.C7.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 6811   | End     | 8822                |
| GI       | none   | Score   | 232                 |
| Exons    | 6811..6996, 6814..6990, 7579..7683, 7580..7693, 7688..7744, 8727..8822 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22188                      | Seq. ID | OJ990505_01.9924.C7 |
| Gene No. | 46265                      | Strand  | -                   |
| Start    | 20136                      | End     | 21043               |
| Name     | OJ990505_01.9924.C7.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 10002                      | End     | 10232               |
| GI       | none                       | Score   | 352                 |
| Exons    | 10002..10232, 10004..10174 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22188                                    | Seq. ID | OJ990505_01.9924.C7 |
| Gene No. | 46265                                    | Strand  | -                   |
| Start    | 20136                                    | End     | 21043               |
| Name     | OJ990505_01.9924.C7.o5.gs                | Method  | GENSCAN             |
| Start    | 20136                                    | End     | 21043               |
| GI       | none                                     | Score   | .55                 |
| Exons    | 20136..20189, 20777..20890, 20987..21043 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22188  | Seq. ID | OJ990505_01.9924.C7 |
| Gene No.    | 46265  | Strand  | -                   |
| Start       | 20136  | End     | 21043               |
| Name        | OJ990505_01.9924.C7.o5.np                          | Method  | AAT/NAP             |
| Start       | 20593  | End     | 21024               |
| GI          | 6735365  | Score   | 83                  |
| Exons       | 20593..20666, 20777..20888, 20984..21024           |         |                     |
| GI Descrip. | (AL137082) putative protein [Arabidopsis thaliana] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22189                                     | Seq. ID | OJ990505_01.9924.C8 |
| Gene No.    | 46266                                     | Strand  | +                   |
| Start       | 842                                       | End     | 1998                |
| Name        | OJ990505_01.9924.C8.o1.np                 | Method  | AAT/NAP             |
| Start       | 842                                       | End     | 1998                |
| GI          | 5042463                                   | Score   | 134                 |
| Exons       | 842..1053, 1712..1858, 1911..1998         |         |                     |
| GI Descrip. | (AC007789) unknown protein [Oryza sativa] |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22190   | Seq. ID | OJ990505_01.9924.C9 |
| Gene No. | 46267   | Strand  | +                   |
| Start    | 766   | End     | 2509                |
| Name     | OJ990505_01.9924.C9.o1.gs                     | Method  | GENSCAN             |
| Start    | 766   | End     | 2271                |
| GI       | none  | Score   | .56                 |
| Exons    | 766..1123, 1551..1619, 2112..2212, 2226..2271 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22190   | Seq. ID | OJ990505_01.9924.C9 |
| Gene No.    | 46267   | Strand  | +                   |
| Start       | 766   | End     | 2509                |
| Name        | OJ990505_01.9924.C9.o1.np   | Method  | AAT/NAP             |
| Start       | 1551  | End     | 2509                |
| GI          | 5295955   | Score   | 109                 |
| Exons       | 1551..1619, 2158..2271, 2493..2509  |         |                     |
| GI Descrip. | (AB026295) Similar to Epstein-Barr virus (EBV) genome.(V01555) [Oryza sativa] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22190   | Seq. ID | OJ990505_01.9924.C9 |
| Gene No.    | 46267   | Strand  | +                   |
| Start       | 766   | End     | 2509                |
| Name        | OJ990505_01.9924.C9.o2.np                               | Method  | AAT/NAP             |
| Start       | 1551  | End     | 2315                |
| GI          | 4680183   | Score   | 141                 |
| Exons       | 1551..1619, 2224..2315                                  |         |                     |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica] |         |                     |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22191   | Seq. ID | OJ990505_01.9924.C14 |
| Gene No.    | 46268   | Strand  | -                    |
| Start       | 60  | End     | 280                  |
| Name        | OJ990505_01.9924.C14.o1.gp  | Method  | AAT/GAP              |
| Start       | 60  | End     | 280                  |
| GI          | 103159_1.R1084  | Score   | 416                  |
| Exons       | 60..280   |         |                      |
| GI Descrip. | '6069643/dbj AP000616.1 AP000616 1.0e-145 Oryza sativa genomic DNA, chromosome 6, clone:P0514G12' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22191  | Seq. ID | OJ990505_01.9924.C14 |
| Gene No.    | 46269  | Strand  | -                    |
| Start       | 701  | End     | 1128                 |
| Name        | OJ990505_01.9924.C14.o1.np   | Method  | AAT/NAP              |
| Start       | 343  | End     | 1128                 |
| GI          | 6069670  | Score   | 557                  |
| Exons       | 343..442, 705..826, 952..1128  |         |                      |
| GI Descrip. | (AP000616) ESTs C73538(E4487),AU078663(E4437) correspond to a region of the predicted gene.; similar to DWARF3 (U32579) [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22191   | Seq. ID | OJ990505_01.9924.C14 |
| Gene No. | 46269   | Strand  | -                    |
| Start    | 701   | End     | 1128                 |
| Name     | OJ990505_01.9924.C14.o1.tm                                    | Method  | TBLASTX:Maize        |
| Start    | 698   | End     | 1060                 |
| GI       | none  | Score   | 167                  |
| Exons    | 698..832, 699..818, 699..833, 951..1043, 952..1059, 953..1060 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22191                      | Seq. ID | OJ990505_01.9924.C14 |
| Gene No. | 46269                      | Strand  | -                    |
| Start    | 701                        | End     | 1128                 |
| Name     | OJ990505_01.9924.C14.o1.gs | Method  | GENSCAN              |
| Start    | 701                        | End     | 1005                 |
| GI       | none                       | Score   | .89                  |
| Exons    | 701..826, 952..1005        |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22192 | Seq. ID | OJ990505_01.9924.C16 |
|----------|-------|---------|----------------------|



Gene No. 46270  
 Start 309  
 Name OJ990505\_01.9924.C16.o1.gs  
 Start 309  
 GI none  
 Exons 309..395

Strand -  
 End 395  
 Method GENSCAN  
 End 395  
 Score .58

Seq. No. 22193  
 Gene No. 46271  
 Start 171  
 Name OJ990505\_01.9924.C17.o1.gp  
 Start 171  
 GI none  
 Exons 171..306

Seq. ID OJ990505\_01.9924.C17  
 Strand +  
 End 306  
 Method AAT/GAP  
 End 306  
 Score 248

Seq. No. 22194  
 Gene No. 46272  
 Start 1  
 Name OJ990505\_01.9924.C20.o1.np  
 Start 1  
 GI 3201682  
 Exons 1..333, 411..668  
 GI Descrip. (AF060942) extra-large G-protein [Arabidopsis thaliana]

Seq. ID OJ990505\_01.9924.C20  
 Strand -  
 End 668  
 Method AAT/NAP  
 End 668  
 Score 319

Seq. No. 22194  
 Gene No. 46272  
 Start 1  
 Name OJ990505\_01.9924.C20.o1.tc  
 Start 74  
 GI none  
 Exons 74..265, 74..334, 90..296, 421..600

Seq. ID OJ990505\_01.9924.C20  
 Strand -  
 End 668  
 Method TBLASTX:Cress  
 End 600  
 Score 94

Seq. No. 22194  
 Gene No. 46272  
 Start 1  
 Name OJ990505\_01.9924.C20.o1.ts  
 Start 76  
 GI none  
 Exons 76..222, 81..278, 83..274, 83..340, 90..335, 433..564

Seq. ID OJ990505\_01.9924.C20  
 Strand -  
 End 668  
 Method TBLASTX:Soybean  
 End 564  
 Score 134

Seq. No. 22194  
 Gene No. 46272  
 Start 1  
 Name OJ990505\_01.9924.C20.o1.tm  
 Start 81  
 GI none  
 Exons 81..323, 82..327, 83..328, 84..329, 373..552, 399..551, 412..552

Seq. ID OJ990505\_01.9924.C20  
 Strand -  
 End 668  
 Method TBLASTX:Maize  
 End 552  
 Score 258

Seq. No. 22194  
 Gene No. 46272  
 Start 1  
 Name OJ990505\_01.9924.C20.o1.gs  
 Start 83  
 GI none  
 Exons 83..327, 411..588

Seq. ID OJ990505\_01.9924.C20  
 Strand -  
 End 668  
 Method GENSCAN  
 End 588  
 Score .83

Seq. No. 22194

Seq. ID OJ990505\_01.9924.C20

|             |   |        |         |
|-------------|---|--------|---------|
| Gene No.    | 46272   | Strand | -       |
| Start       | 1   | End    | 668     |
| Name        | OJ990505_01.9924.C20.o2.gp  | Method | AAT/GAP |
| Start       | 276   | End    | 594     |
| GI          | 2309968   | Score  | 380     |
| Exons       | 276..327, 411..594  |        |         |
| GI Descrip. | 3242709 5.0e-18 (AC003040) putative guanine nucleotide-binding protein [Arabidopsis thaliana] |        |         |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22195   | Seq. ID | OJ990505_01.9924.C21 |
| Gene No.    | 46273   | Strand  | +                    |
| Start       | 176   | End     | 834                  |
| Name        | OJ990505_01.9924.C21.o1.np  | Method  | AAT/NAP              |
| Start       | 176   | End     | 834                  |
| GI          | 6069670   | Score   | 433                  |
| Exons       | 176..254, 433..539, 664..834  |         |                      |
| GI Descrip. | (AP000616) ESTs C73538(E4487), AU078663(E4437) correspond to a region of the predicted gene.; similar to DWARF3 (U32579) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22195  | Seq. ID | OJ990505_01.9924.C21 |
| Gene No. | 46273  | Strand  | +                    |
| Start    | 176  | End     | 834                  |
| Name     | OJ990505_01.9924.C21.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 199  | End     | 780                  |
| GI       | none   | Score   | 84                   |
| Exons    | 199..255, 200..256, 432..539, 446..541, 448..558, 448..540, 657..776, 658..780, 674..775, 681..779 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22195                                  | Seq. ID | OJ990505_01.9924.C21 |
| Gene No. | 46273                                  | Strand  | +                    |
| Start    | 176                                    | End     | 834                  |
| Name     | OJ990505_01.9924.C21.o1.ts             | Method  | TBLASTX:Soybean      |
| Start    | 431                                    | End     | 822                  |
| GI       | none                                   | Score   | 110                  |
| Exons    | 431..538, 432..539, 676..822, 696..758 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22196  | Seq. ID | OJ990505_01.9924.C22 |
| Gene No.    | 46274  | Strand  | -                    |
| Start       | 1  | End     | 734                  |
| Name        | OJ990505_01.9924.C22.o1.np                         | Method  | AAT/NAP              |
| Start       | 1  | End     | 734                  |
| GI          | 5051776  | Score   | 104                  |
| Exons       | 1..81, 550..734                                    |         |                      |
| GI Descrip. | (AL078637) putative protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22196                      | Seq. ID | OJ990505_01.9924.C22 |
| Gene No. | 46274                      | Strand  | -                    |
| Start    | 1                          | End     | 734                  |
| Name     | OJ990505_01.9924.C22.o1.gs | Method  | GENSCAN              |
| Start    | 549                        | End     | 677                  |
| GI       | none                       | Score   | .69                  |
| Exons    | 549..677                   |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22197 | Seq. ID | OJ990505_01.9924.C24 |
| Gene No. | 46275 | Strand  | +                    |
| Start    | 3739  | End     | 7043                 |

Name OJ990505\_01.9924.C24.o2.np Method AAT/NAP  
 Start 3739 End 7043  
 GI 6721512 Score 105  
 Exons 3739..3888, 5650..5762, 7008..7043  
 GI Descrip. (AP001072) hypothetical protein [Oryza sativa]

Seq. No. 22197 Seq. ID OJ990505\_01.9924.C24  
 Gene No. 46275 Strand +  
 Start 3739 End 7043  
 Name OJ990505\_01.9924.C24.o3.gs Method GENSCAN  
 Start 5974 End 6854  
 GI none Score .81  
 Exons 5974..6620, 6703..6854

Seq. No. 22197 Seq. ID OJ990505\_01.9924.C24  
 Gene No. 46275 Strand +  
 Start 3739 End 7043  
 Name OJ990505\_01.9924.C24.o3.np Method AAT/NAP  
 Start 6185 End 7043  
 GI 4538896 Score 445  
 Exons 6185..6602, 6712..7043  
 GI Descrip. (AL049482) putative protein [Arabidopsis thaliana]

Seq. No. 22197 Seq. ID OJ990505\_01.9924.C24  
 Gene No. 46276 Strand -  
 Start 1 End 2472  
 Name OJ990505\_01.9924.C24.o1.np Method AAT/NAP  
 Start 1 End 2472  
 GI 5042463 Score 126  
 Exons 1..20, 830..909, 961..1097, 2256..2472  
 GI Descrip. (AC007789) unknown protein [Oryza sativa]

Seq. No. 22198 Seq. ID OJ990505\_01.9924.C25  
 Gene No. 46277 Strand +  
 Start 1 End 4342  
 Name OJ990505\_01.9924.C25.o1.np Method AAT/NAP  
 Start 1 End 742  
 GI 4538896 Score 453  
 Exons 1..742  
 GI Descrip. (AL049482) putative protein [Arabidopsis thaliana]

Seq. No. 22198 Seq. ID OJ990505\_01.9924.C25  
 Gene No. 46277 Strand +  
 Start 1 End 4342  
 Name OJ990505\_01.9924.C25.o1.gs Method GENSCAN  
 Start 26 End 3118  
 GI none Score .48  
 Exons 26..764, 2146..2243, 2957..3118

Seq. No. 22198 Seq. ID OJ990505\_01.9924.C25  
 Gene No. 46277 Strand +  
 Start 1 End 4342  
 Name OJ990505\_01.9924.C25.o2.np Method AAT/NAP  
 Start 870 End 4342  
 GI 6721512 Score 44  
 Exons 870..926, 2777..3009, 4287..4342  
 GI Descrip. (AP001072) hypothetical protein [Oryza sativa]

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22198   | Seq. ID | OJ990505_01.9924.C25 |
| Gene No.    | 46277   | Strand  | +                    |
| Start       | 1   | End     | 4342                 |
| Name        | OJ990505_01.9924.C25.o3.np  | Method  | AAT/NAP              |
| Start       | 3217  | End     | 3312                 |
| GI          | 5922634   | Score   | 65                   |
| Exons       | 3217..3312  |         |                      |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6016867 dbj BAA85210.1  (AP000570) hypothetical protein [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22198  | Seq. ID | OJ990505_01.9924.C25 |
| Gene No. | 46278  | Strand  | -                    |
| Start    | 5761   | End     | 8406                 |
| Name     | OJ990505_01.9924.C25.o2.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 413  | End     | 823                  |
| GI       | none   | Score   | 238                  |
| Exons    | 413..646, 413..646, 414..794, 417..728, 586..816, 695..823 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22198                              | Seq. ID | OJ990505_01.9924.C25 |
| Gene No. | 46278                              | Strand  | -                    |
| Start    | 5761                               | End     | 8406                 |
| Name     | OJ990505_01.9924.C25.o2.gs         | Method  | GENSCAN              |
| Start    | 5761                               | End     | 8406                 |
| GI       | none                               | Score   | .43                  |
| Exons    | 5761..6878, 7865..8153, 8245..8406 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22198  | Seq. ID | OJ990505_01.9924.C25 |
| Gene No. | 46278  | Strand  | -                    |
| Start    | 5761   | End     | 8406                 |
| Name     | OJ990505_01.9924.C25.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 5910   | End     | 6415                 |
| GI       | none   | Score   | 145                  |
| Exons    | 5910..6107, 5911..6114, 5912..6115, 6127..6411, 6134..6415 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22199                      | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46279                      | Strand  | +                    |
| Start    | 329                        | End     | 1507                 |
| Name     | OJ990505_01.9924.C26.o1.gs | Method  | GENSCAN              |
| Start    | 329                        | End     | 1507                 |
| GI       | none                       | Score   | .52                  |
| Exons    | 329..1507                  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46280  | Strand  | -                    |
| Start    | 3033   | End     | 6941                 |
| Name     | OJ990505_01.9924.C26.o2.gs   | Method  | GENSCAN              |
| Start    | 3033   | End     | 6871                 |
| GI       | none   | Score   | .72                  |
| Exons    | 3033..3611, 3707..3771, 3901..4022, 4129..4216, 4285..4413, 4595..4906, 4995..6276, 6383..6871 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22199                      | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46280                      | Strand  | -                    |
| Start    | 3033                       | End     | 6941                 |
| Name     | OJ990505_01.9924.C26.o1.np | Method  | AAT/NAP              |

|             |  |       |      |
|-------------|--|-------|------|
| Start       | 3138   | End   | 6941 |
| GI          | 2191192  | Score | 1762 |
| Exons       | 3138..3646, 3898..3957, 4595..6276, 6410..6941   |       |      |
| GI Descrip. | (AF007271) similar to N. tabacum membrane-associated salt-inducible protein (PID:g473874) [Arabidopsis thaliana] |       |      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22199                        | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281                        | Strand  | -                    |
| Start    | 7683                         | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 290                          | End     | 568                  |
| GI       | none                         | Score   | 236                  |
| Exons    | 290..568, 325..531, 389..535 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 875  | End     | 1342                 |
| GI       | none   | Score   | 105                  |
| Exons    | 875..997, 893..997, 1010..1177, 1023..1142, 1180..1329, 1190..1342 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22199                      | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281                      | Strand  | -                    |
| Start    | 7683                       | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 1210                       | End     | 1495                 |
| GI       | none                       | Score   | 414                  |
| Exons    | 1210..1494, 1211..1495     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o6.tm   | Method  | TBLASTX:Maize        |
| Start    | 3300   | End     | 6267                 |
| GI       | none   | Score   | 203                  |
| Exons    | 3300..3455, 4590..4736, 4599..4733, 5326..5745, 5359..5844, 5647..6267 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o4.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 3375   | End     | 6267                 |
| GI       | none   | Score   | 228                  |
| Exons    | 3375..3608, 5326..5739, 5509..6267, 6115..6249 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o5.tm   | Method  | TBLASTX:Maize        |
| Start    | 3708   | End     | 4016                 |
| GI       | none   | Score   | 48                   |
| Exons    | 3708..3731, 3737..3793, 3738..3773, 3881..4015, 3882..4016, 3900..4016 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22199                              | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281                              | Strand  | -                    |
| Start    | 7683                               | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o3.tm         | Method  | TBLASTX:Maize        |
| Start    | 7675                               | End     | 7919                 |
| GI       | none                               | Score   | 205                  |
| Exons    | 7675..7752, 7695..7919, 7695..7919 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22199                              | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281                              | Strand  | -                    |
| Start    | 7683                               | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o1.ts         | Method  | TBLASTX:Soybean      |
| Start    | 7683                               | End     | 8099                 |
| GI       | none                               | Score   | 122                  |
| Exons    | 7683..7976, 7683..8099, 7795..8076 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o3.gs   | Method  | GENSCAN              |
| Start    | 7683   | End     | 13015                |
| GI       | none   | Score   | .7                   |
| Exons    | 7683..8073, 8434..8631, 8952..9124, 9443..9687, 9771..9948, 10379..10561, 10857..10962, 11757..11935, 12022..12867, 12881..13015 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No.    | 46281  | Strand  | -                    |
| Start       | 7683   | End     | 13129                |
| Name        | OJ990505_01.9924.C26.o2.np   | Method  | AAT/NAP              |
| Start       | 7701   | End     | 13129                |
| GI          | 3242709  | Score   | 1488                 |
| Exons       | 7701..8073, 8434..8677, 8968..9124, 9443..9693, 9771..9948, 10379..10561, 10857..10962, 11798..11935, 12022..12543, 13055..13129 |         |                      |
| GI Descrip. | (AC003040) putative GTP-binding protein (extra large) [Arabidopsis thaliana]   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 7764   | End     | 12441                |
| GI       | none   | Score   | 70                   |
| Exons    | 7764..7949, 7890..8069, 7941..8057, 7957..8070, 8430..8477, 8514..8639, 8515..8640, 8517..8660, 8978..9127, 9030..9125, 9434..9625, 9434..9694, 9450..9656, 9781..9960, 10373..10477, 10466..10555, 10885..10995, 10897..10968, 11792..11935, 11811..11963, 12016..12342, 12020..12403, 12022..12441 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o1.gp                     | Method  | AAT/GAP              |
| Start    | 7890   | End     | 9564                 |
| GI       | 12417_1.R1084                                  | Score   | 1248                 |
| Exons    | 7890..8073, 8434..8631, 8952..9124, 9443..9564 |         |                      |

GI Descrip. '3242709 5.0e-18 (AC003040) putative guanine nucleotide-binding protein [Arabidopsis thaliana]'

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 7971   | End     | 9912                 |
| GI       | none   | Score   | 130                  |
| Exons    | 7971..8075, 7972..8073, 8386..8634, 8430..8630, 8433..8639, 8437..8640, 8949..9125, 8951..9127, 8977..9138, 9442..9687, 9443..9688, 9444..9689, 9733..9912, 9759..9911, 9772..9912 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 9029   | End     | 9924                 |
| GI       | none   | Score   | 135                  |
| Exons    | 9029..9127, 9436..9582, 9441..9638, 9443..9634, 9443..9700, 9450..9695, 9793..9924 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22199   | Seq. ID | OJ990505_01.9924.C26 |
| Gene No.    | 46281   | Strand  | -                    |
| Start       | 7683  | End     | 13129                |
| Name        | OJ990505_01.9924.C26.o2.gp  | Method  | AAT/GAP              |
| Start       | 9636  | End     | 10563                |
| GI          | 2309968   | Score   | 693                  |
| Exons       | 9636..9687, 9771..9948, 10379..10563  |         |                      |
| GI Descrip. | 3242709 5.0e-18 (AC003040) putative guanine nucleotide-binding protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 12020  | End     | 12388                |
| GI       | none   | Score   | 65                   |
| Exons    | 12020..12157, 12022..12351, 12022..12387, 12203..12385, 12242..12388 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199                                    | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281                                    | Strand  | -                    |
| Start    | 7683                                     | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o2.tm               | Method  | TBLASTX:Maize        |
| Start    | 12211                                    | End     | 12488                |
| GI       | none                                     | Score   | 285                  |
| Exons    | 12211..12486, 12212..12463, 12309..12488 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22199  | Seq. ID | OJ990505_01.9924.C26 |
| Gene No. | 46281  | Strand  | -                    |
| Start    | 7683   | End     | 13129                |
| Name     | OJ990505_01.9924.C26.o7.tm                             | Method  | TBLASTX:Maize        |
| Start    | 12835  | End     | 12988                |
| GI       | none   | Score   | 114                  |
| Exons    | 12835..12873, 12858..12950, 12878..12988, 12879..12965 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22200  | Seq. ID | OJ990505_01.9924.C27 |
| Gene No. | 46282  | Strand  | +                    |
| Start    | 4570   | End     | 6161                 |
| Name     | OJ990505_01.9924.C27.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 4568   | End     | 5134                 |
| GI       | none   | Score   | 574                  |
| Exons    | 4568..4891, 4576..5130, 4582..4941, 4586..5134, 4656..5129, 4940..5134 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22200   | Seq. ID | OJ990505_01.9924.C27 |
| Gene No.    | 46282   | Strand  | +                    |
| Start       | 4570  | End     | 6161                 |
| Name        | OJ990505_01.9924.C27.o1.gp  | Method  | AAT/GAP              |
| Start       | 4570  | End     | 6161                 |
| GI          | 13176_2.R1084   | Score   | 1228                 |
| Exons       | 4570..4787, 5642..5919, 5958..6161  |         |                      |
| GI Descrip. | '3342802 7.0e-61 (AF061838) putative cytosolic 6-phosphogluconate dehydrogenase [Zea mays]' |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22200                              | Seq. ID | OJ990505_01.9924.C27 |
| Gene No. | 46282                              | Strand  | +                    |
| Start    | 4570                               | End     | 6161                 |
| Name     | OJ990505_01.9924.C27.o2.tw         | Method  | TBLASTX:Wheat        |
| Start    | 4585                               | End     | 4897                 |
| GI       | none                               | Score   | 389                  |
| Exons    | 4585..4896, 4585..4896, 4586..4897 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22200   | Seq. ID | OJ990505_01.9924.C27 |
| Gene No.    | 46282   | Strand  | +                    |
| Start       | 4570  | End     | 6161                 |
| Name        | OJ990505_01.9924.C27.o1.np  | Method  | AAT/NAP              |
| Start       | 4589  | End     | 6042                 |
| GI          | 3342802   | Score   | 2090                 |
| Exons       | 4589..6042  |         |                      |
| GI Descrip. | (AF061838) putative cytosolic 6-phosphogluconate dehydrogenase [Zea mays] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22200  | Seq. ID | OJ990505_01.9924.C27 |
| Gene No. | 46282  | Strand  | +                    |
| Start    | 4570   | End     | 6161                 |
| Name     | OJ990505_01.9924.C27.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 4597   | End     | 5110                 |
| GI       | none   | Score   | 783                  |
| Exons    | 4597..4938, 4598..5110, 4656..5096, 4996..5109 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22200  | Seq. ID | OJ990505_01.9924.C27 |
| Gene No. | 46282  | Strand  | +                    |
| Start    | 4570   | End     | 6161                 |
| Name     | OJ990505_01.9924.C27.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4597   | End     | 6036                 |
| GI       | none   | Score   | 848                  |
| Exons    | 4597..4935, 4598..5134, 4601..5134, 5211..5519, 5212..5556, 5434..5556, 5523..5606, 5524..6036, 5524..5898, 5664..5918, 5958..6023 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22200 | Seq. ID | OJ990505_01.9924.C27 |
| Gene No. | 46282 | Strand  | +                    |



|       |  |        |               |
|-------|--|--------|---------------|
| Start | 4570   | End    | 6161          |
| Name  | OJ990505_01.9924.C27.o1.tm   | Method | TBLASTX:Maize |
| Start | 5212   | End    | 6159          |
| GI    | none   | Score  | 1258          |
| Exons | 5212..6042, 5213..5581, 5214..5606, 5425..5898, 5658..6038, 5962..6042, 5963..6058, 6103..6159 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22200  | Seq. ID | OJ990505_01.9924.C27 |
| Gene No. | 46282  | Strand  | +                    |
| Start    | 4570   | End     | 6161                 |
| Name     | OJ990505_01.9924.C27.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 5345   | End     | 6054                 |
| GI       | none   | Score   | 103                  |
| Exons    | 5345..5524, 5345..5500, 5349..5519, 5350..5556, 5353..5556, 5523..5606, 5524..5733, 5524..5724, 5658..5729, 5824..5865, 5856..5915, 5857..5913, 5958..6050, 5959..6054, 5962..6051 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22200  | Seq. ID | OJ990505_01.9924.C27 |
| Gene No. | 46282  | Strand  | +                    |
| Start    | 4570   | End     | 6161                 |
| Name     | OJ990505_01.9924.C27.o3.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 5387   | End     | 5523                 |
| GI       | none   | Score   | 71                   |
| Exons    | 5387..5506, 5387..5503, 5388..5516, 5389..5523 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22200                              | Seq. ID | OJ990505_01.9924.C27 |
| Gene No. | 46282                              | Strand  | +                    |
| Start    | 4570                               | End     | 6161                 |
| Name     | OJ990505_01.9924.C27.o1.tw         | Method  | TBLASTX:Wheat        |
| Start    | 5563                               | End     | 5970                 |
| GI       | none                               | Score   | 575                  |
| Exons    | 5563..5970, 5575..5898, 5658..5918 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22201                      | Seq. ID | OJ990505_01.9924.C28 |
| Gene No. | 46283                      | Strand  | -                    |
| Start    | 463                        | End     | 593                  |
| Name     | OJ990505_01.9924.C28.o1.gs | Method  | GENSCAN              |
| Start    | 463                        | End     | 593                  |
| GI       | none                       | Score   | .57                  |
| Exons    | 463..593                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22202                                  | Seq. ID | OJ990505_01.9924.C29 |
| Gene No. | 46284                                  | Strand  |                      |
| Start    | 225                                    | End     | 688                  |
| Name     | OJ990505_01.9924.C29.o1.tm             | Method  | TBLASTX:Maize        |
| Start    | 225                                    | End     | 688                  |
| GI       | none                                   | Score   | 78                   |
| Exons    | 225..293, 327..362, 442..687, 533..688 |         |                      |

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 22203                                | Seq. ID | OJ990505_01.9924.C31 |
| Gene No. | 46285                                | Strand  | -                    |
| Start    | 137                                  | End     | 350                  |
| Name     | OJ990505_01.9924.C31.o1.tm           | Method  | TBLASTX:Maize        |
| Start    | 93                                   | End     | 342                  |
| GI       | none                                 | Score   | 62                   |
| Exons    | 93..143, 94..141, 216..341, 232..342 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22203   | Seq. ID | OJ990505_01.9924.C31 |
| Gene No.    | 46285   | Strand  | -                    |
| Start       | 137   | End     | 350                  |
| Name        | OJ990505_01.9924.C31.o1.gs  | Method  | GENSCAN              |
| Start       | 137   | End     | 350                  |
| GI          | none  | Score   | .99                  |
| Exons       | 137..350  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22204   | Seq. ID | OJ990505_01.9924.C34 |
| Gene No.    | 46286   | Strand  | -                    |
| Start       | 1   | End     | 245                  |
| Name        | OJ990505_01.9924.C34.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 245                  |
| GI          | 6069670   | Score   | 166                  |
| Exons       | 1..176, 212..245  |         |                      |
| GI Descrip. | (AP000616) ESTs C73538(E4487), AU078663(E4437) correspond to a region of the predicted gene.; similar to DWARF3 (U32579) [Oryza sativa] |         |                      |
|             |   |         |                      |
| Seq. No.    | 22204   | Seq. ID | OJ990505_01.9924.C34 |
| Gene No.    | 46286   | Strand  | -                    |
| Start       | 1   | End     | 245                  |
| Name        | OJ990505_01.9924.C34.o1.gs  | Method  | GENSCAN              |
| Start       | 70  | End     | 123                  |
| GI          | none  | Score   | .48                  |
| Exons       | 70..123   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22205   | Seq. ID | OJ990505_01.9924.C36 |
| Gene No.    | 46287   | Strand  | -                    |
| Start       | 1   | End     | 556                  |
| Name        | OJ990505_01.9924.C36.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 556                  |
| GI          | 6721512   | Score   | 56                   |
| Exons       | 1..23, 428..556   |         |                      |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22206   | Seq. ID | OJ990415_08.9922.C2  |
| Gene No.    | 46288   | Strand  | +                    |
| Start       | 367   | End     | 440                  |
| Name        | OJ990415_08.9922.C2.o1.gs   | Method  | GENSCAN              |
| Start       | 367   | End     | 440                  |
| GI          | none  | Score   | .76                  |
| Exons       | 367..440  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22206   | Seq. ID | OJ990415_08.9922.C2  |
| Gene No.    | 46289   | Strand  | +                    |
| Start       | 1015  | End     | 3590                 |
| Name        | OJ990415_08.9922.C2.o2.gs   | Method  | GENSCAN              |
| Start       | 1015  | End     | 3590                 |
| GI          | none  | Score   | .55                  |
| Exons       | 1015..1148, 1268..1377, 2254..2324, 3205..3325, 3423..3590  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22207   | Seq. ID | OJ990415_08.9922.C3  |
| Gene No.    | 46290   | Strand  | +                    |
| Start       | 540   | End     | 1100                 |
| Name        | OJ990415_08.9922.C3.o1.gs   | Method  | GENSCAN              |
| Start       | 540   | End     | 1100                 |

|          |  |         |                     |
|----------|--|---------|---------------------|
| GI       | none   | Score   | .6                  |
| Exons    | 540..722, 742..1100  |         |                     |
|          |  |         |                     |
| Seq. No. | 22208  | Seq. ID | OJ990415_08.9922.C4 |
| Gene No. | 46291  | Strand  | +                   |
| Start    | 67   | End     | 1164                |
| Name     | OJ990415_08.9922.C4.o1.gs  | Method  | GENSCAN             |
| Start    | 67   | End     | 1164                |
| GI       | none   | Score   | .81                 |
| Exons    | 67..295, 302..469, 822..882, 1047..1164  |         |                     |
|          |  |         |                     |
| Seq. No. | 22208  | Seq. ID | OJ990415_08.9922.C4 |
| Gene No. | 46292  | Strand  | -                   |
| Start    | 1429   | End     | 3203                |
| Name     | OJ990415_08.9922.C4.o2.gs  | Method  | GENSCAN             |
| Start    | 1429   | End     | 3203                |
| GI       | none   | Score   | .72                 |
| Exons    | 1429..1496, 1501..1692, 1916..1991, 2340..2489, 3150..3203   |         |                     |
|          |  |         |                     |
| Seq. No. | 22209  | Seq. ID | OJ990415_08.9922.C5 |
| Gene No. | 46293  | Strand  | -                   |
| Start    | 952  | End     | 1039                |
| Name     | OJ990415_08.9922.C5.o1.gs  | Method  | GENSCAN             |
| Start    | 952  | End     | 1039                |
| GI       | none   | Score   | .43                 |
| Exons    | 952..1039  |         |                     |
|          |  |         |                     |
| Seq. No. | 22210  | Seq. ID | OJ990415_08.9922.C6 |
| Gene No. | 46294  | Strand  | +                   |
| Start    | 757  | End     | 1362                |
| Name     | OJ990415_08.9922.C6.o1.gs  | Method  | GENSCAN             |
| Start    | 757  | End     | 1362                |
| GI       | none   | Score   | .51                 |
| Exons    | 757..968, 1329..1362   |         |                     |
|          |  |         |                     |
| Seq. No. | 22210  | Seq. ID | OJ990415_08.9922.C6 |
| Gene No. | 46295  | Strand  | -                   |
| Start    | 1093   | End     | 3383                |
| Name     | OJ990415_08.9922.C6.o1.gp  | Method  | AAT/GAP             |
| Start    | 1093   | End     | 3383                |
| GI       | none   | Score   | 849                 |
| Exons    | 1093..1501, 3313..3383   |         |                     |
|          |  |         |                     |
| Seq. No. | 22210  | Seq. ID | OJ990415_08.9922.C6 |
| Gene No. | 46296  | Strand  | -                   |
| Start    | 3305   | End     | 4887                |
| Name     | OJ990415_08.9922.C6.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 981  | End     | 1371                |
| GI       | none   | Score   | 34                  |
| Exons    | 981..1016, 981..1019, 1096..1155, 1097..1156, 1101..1160, 1108..1167, 1110..1169, 1119..1223, 1162..1179, 1174..1242, 1176..1211, 1178..1246, 1207..1248, 1211..1258, 1212..1259, 1213..1260, 1276..1317, 1278..1316, 1288..1317, 1334..1369, 1335..1370, 1335..1370, 1336..1371 |         |                     |
|          |  |         |                     |
| Seq. No. | 22210  | Seq. ID | OJ990415_08.9922.C6 |
| Gene No. | 46296  | Strand  | -                   |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 3305   | End    | 4887          |
| Name  | OJ990415_08.9922.C6.o1.tm  | Method | TBLASTX:Maize |
| Start | 1110   | End    | 4887          |
| GI    | none   | Score  | 53            |
| Exons | 1110..1145, 1119..1142, 1137..1178, 1138..1179, 1144..1179,<br>1172..1213, 1174..1212, 1176..1217, 1211..1255, 1212..1259,<br>1213..1260, 1250..1363, 1251..1361, 1288..1362, 1343..1438,<br>1346..1438, 1360..1443, 1360..1440, 1435..1503, 1445..1504,<br>1464..1544, 3275..3592, 3313..3591, 3587..3706, 3592..3714,<br>3701..4408, 3704..3808, 3705..4427, 3709..4428, 3760..4434,<br>4163..4213, 4199..4465, 4256..4399, 4266..4400, 4433..4495,<br>4454..4495, 4630..4875, 4630..4872, 4669..4836, 4703..4831,<br>4864..4887 |        |               |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22210                     | Seq. ID | OJ990415_08.9922.C6 |
| Gene No. | 46296                     | Strand  | -                   |
| Start    | 3305                      | End     | 4887                |
| Name     | OJ990415_08.9922.C6.o2.gs | Method  | GENSCAN             |
| Start    | 3305                      | End     | 4854                |
| GI       | none                      | Score   | .73                 |
| Exons    | 3305..4495, 4633..4854    |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22210  | Seq. ID | OJ990415_08.9922.C6 |
| Gene No.    | 46296  | Strand  | -                   |
| Start       | 3305   | End     | 4887                |
| Name        | OJ990415_08.9922.C6.o1.np                                      | Method  | AAT/NAP             |
| Start       | 3308   | End     | 4854                |
| GI          | 6648193  | Score   | 1086                |
| Exons       | 3308..4495, 4633..4854   |         |                     |
| GI Descrip. | (AC013483) putative RNA-binding protein [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22210  | Seq. ID | OJ990415_08.9922.C6 |
| Gene No. | 46296  | Strand  | -                   |
| Start    | 3305   | End     | 4887                |
| Name     | OJ990415_08.9922.C6.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 3443   | End     | 4848                |
| GI       | none   | Score   | 284                 |
| Exons    | 3443..3547, 3570..3602, 3929..4027, 4124..4408, 4125..4418,<br>4283..4399, 4454..4495, 4473..4496, 4630..4848, 4631..4831,<br>4636..4848, 4693..4848 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22210   | Seq. ID | OJ990415_08.9922.C6 |
| Gene No. | 46296   | Strand  | -                   |
| Start    | 3305  | End     | 4887                |
| Name     | OJ990415_08.9922.C6.o1.ts   | Method  | TBLASTX:Soybean     |
| Start    | 3534  | End     | 4860                |
| GI       | none  | Score   | 35                  |
| Exons    | 3534..3587, 3630..3656, 3704..3925, 3766..3873, 3899..3973,<br>3900..3956, 3953..3973, 3977..4144, 4023..4142, 4145..4408,<br>4149..4424, 4226..4399, 4460..4495, 4460..4495, 4630..4860,<br>4631..4831, 4636..4860, 4666..4836, 4703..4831 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22210                     | Seq. ID | OJ990415_08.9922.C6 |
| Gene No. | 46296                     | Strand  | -                   |
| Start    | 3305                      | End     | 4887                |
| Name     | OJ990415_08.9922.C6.o2.gp | Method  | AAT/GAP             |
| Start    | 3935                      | End     | 4369                |

GI uC-osflcyp005f12b1 Score 870  
 Exons 3935..4369  
 GI Descrip. '4938503/emb|CAB43861.1| 3.0e-39 (AL078465) hnRNP-like protein  
 [Arabidopsis thaliana]'

Seq. No. 22210 Seq. ID OJ990415\_08.9922.C6  
 Gene No. 46296 Strand -  
 Start 3305 End 4887  
 Name OJ990415\_08.9922.C6.o3.gp Method AAT/GAP  
 Start 4418 End 4879  
 GI 7691\_1.R1084 Score 555  
 Exons 4418..4495, 4633..4879  
 GI Descrip. '4938503/emb|CAB43861.1| 8.0e-27 (AL078465) hnRNP-like protein  
 [Arabidopsis thaliana]'

Seq. No. 22211 Seq. ID OJ990415\_08.9922.C7  
 Gene No. 46297 Strand -  
 Start 1 End 86  
 Name OJ990415\_08.9922.C7.o1.gp Method AAT/GAP  
 Start 1 End 86  
 GI none Score 172  
 Exons 1..86

Seq. No. 22211 Seq. ID OJ990415\_08.9922.C7  
 Gene No. 46298 Strand -  
 Start 1174 End 1281  
 Name OJ990415\_08.9922.C7.o1.np Method AAT/NAP  
 Start 1174 End 1281  
 GI 6721547 Score 99  
 Exons 1174..1281  
 GI Descrip. (AP001073) Similar to Oryza sativa gene for Pib. (AB013448)

Seq. No. 22211 Seq. ID OJ990415\_08.9922.C7  
 Gene No. 46299 Strand -  
 Start 3572 End 7309  
 Name OJ990415\_08.9922.C7.o2.gs Method GENSCAN  
 Start 3572 End 7309  
 GI none Score .7  
 Exons 3572..3771, 5080..5160, 6817..6873, 7262..7309

Seq. No. 22212 Seq. ID OJ990415\_08.9922.C8  
 Gene No. 46300 Strand +  
 Start 710 End 3694  
 Name OJ990415\_08.9922.C8.o1.np Method AAT/NAP  
 Start 710 End 3694  
 GI 81286 Score 153  
 Exons 710..1276, 3462..3694  
 GI Descrip. extensin - Volvox carteri (fragment) gi|21992|emb|CAA46283|  
 (X65165) extensin [Volvox carteri]

Seq. No. 22212 Seq. ID OJ990415\_08.9922.C8  
 Gene No. 46301 Strand +  
 Start 3793 End 4551  
 Name OJ990415\_08.9922.C8.o2.gs Method GENSCAN  
 Start 3793 End 4551  
 GI none Score .99  
 Exons 3793..3859, 3944..4551

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22212  | Seq. ID | OJ990415_08.9922.C8  |
| Gene No.    | 46302  | Strand  | -                    |
| Start       | 772  | End     | 2950                 |
| Name        | OJ990415_08.9922.C8.o1.gs  | Method  | GENSCAN              |
| Start       | 772  | End     | 2950                 |
| GI          | none   | Score   | .96                  |
| Exons       | 772..1274, 2902..2950  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22213  | Seq. ID | OJ990415_08.9922.C9  |
| Gene No.    | 46303  | Strand  | +                    |
| Start       | 1  | End     | 1893                 |
| Name        | OJ990415_08.9922.C9.o1.np  | Method  | AAT/NAP              |
| Start       | 1  | End     | 1893                 |
| GI          | 4056454  | Score   | 78                   |
| Exons       | 1..194, 769..939, 1800..1893   |         |                      |
| GI Descrip. | (AC005990) Contains repeated region with similarity to gb U43627<br>extensin (atExt1) gene from Arabidopsis thaliana. ESTs<br>gb Z34165 and gb Z18788 come from this gene. [Arabidopsis<br>thaliana] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22214  | Seq. ID | OJ990415_08.9922.C10 |
| Gene No.    | 46304  | Strand  | +                    |
| Start       | 6767   | End     | 8183                 |
| Name        | OJ990415_08.9922.C10.o2.gs   | Method  | GENSCAN              |
| Start       | 6767   | End     | 8183                 |
| GI          | none   | Score   | .47                  |
| Exons       | 6767..6856, 6962..7072, 7965..8183   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22214  | Seq. ID | OJ990415_08.9922.C10 |
| Gene No.    | 46305  | Strand  | -                    |
| Start       | 600  | End     | 4534                 |
| Name        | OJ990415_08.9922.C10.o1.gs   | Method  | GENSCAN              |
| Start       | 600..  | End     | 4534                 |
| GI          | none   | Score   | .83                  |
| Exons       | 600..1238, 1339..2511, 2606..2675, 2764..2907, 3525..3672,<br>4366..4534   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22214  | Seq. ID | OJ990415_08.9922.C10 |
| Gene No.    | 46306  | Strand  | -                    |
| Start       | 7070   | End     | 9212                 |
| Name        | OJ990415_08.9922.C10.o2.ts   | Method  | TBLASTX:Soybean      |
| Start       | 1062   | End     | 1488                 |
| GI          | none   | Score   | 107                  |
| Exons       | 1062..1235, 1345..1488   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22214  | Seq. ID | OJ990415_08.9922.C10 |
| Gene No.    | 46306  | Strand  | -                    |
| Start       | 7070   | End     | 9212                 |
| Name        | OJ990415_08.9922.C10.o3.tm   | Method  | TBLASTX:Maize        |
| Start       | 1092   | End     | 1491                 |
| GI          | none   | Score   | 134                  |
| Exons       | 1092..1244, 1093..1239, 1342..1491   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22214  | Seq. ID | OJ990415_08.9922.C10 |
| Gene No.    | 46306  | Strand  | -                    |
| Start       | 7070   | End     | 9212                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990415_08.9922.C10.o2.tm   | Method  | TBLASTX:Maize        |
| Start       | 2272   | End     | 2841                 |
| GI          | none   | Score   | 47                   |
| Exons       | 2272..2313, 2272..2313, 2309..2431, 2317..2448, 2458..2514, 2474..2512, 2606..2689, 2606..2668, 2749..2823, 2763..2840, 2767..2841 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22214  | Seq. ID | OJ990415_08.9922.C10 |
| Gene No.    | 46306  | Strand  | -                    |
| Start       | 7070   | End     | 9212                 |
| Name        | OJ990415_08.9922.C10.o3.np   | Method  | AAT/NAP              |
| Start       | 7070   | End     | 9212                 |
| GI          | 4678362  | Score   | 318                  |
| Exons       | 7070..7116, 8001..8089, 8750..9212   |         |                      |
| GI Descrip. | (AL049659) protein kinase-like protein [Arabidopsis thaliana]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22214  | Seq. ID | OJ990415_08.9922.C10 |
| Gene No.    | 46306  | Strand  | -                    |
| Start       | 7070   | End     | 9212                 |
| Name        | OJ990415_08.9922.C10.o3.gs   | Method  | GENSCAN              |
| Start       | 8736   | End     | 9131                 |
| GI          | none   | Score   | 1                    |
| Exons       | 8736..9131   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22214  | Seq. ID | OJ990415_08.9922.C10 |
| Gene No.    | 46306  | Strand  | -                    |
| Start       | 7070   | End     | 9212                 |
| Name        | OJ990415_08.9922.C10.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 8757   | End     | 9129                 |
| GI          | none   | Score   | 175                  |
| Exons       | 8757..9128, 8872..9129   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22214  | Seq. ID | OJ990415_08.9922.C10 |
| Gene No.    | 46306  | Strand  | -                    |
| Start       | 7070   | End     | 9212                 |
| Name        | OJ990415_08.9922.C10.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 8757   | End     | 9128                 |
| GI          | none   | Score   | 302                  |
| Exons       | 8757..9128, 8776..9126   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22214  | Seq. ID | OJ990415_08.9922.C10 |
| Gene No.    | 46306  | Strand  | -                    |
| Start       | 7070   | End     | 9212                 |
| Name        | OJ990415_08.9922.C10.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 8757   | End     | 9126                 |
| GI          | none   | Score   | 466                  |
| Exons       | 8757..9125, 8773..9126   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No.    | 46307  | Strand  | +                    |
| Start       | 5347   | End     | 6566                 |
| Name        | OJ990415_08.9922.C11.o3.gs   | Method  | GENSCAN              |
| Start       | 5347   | End     | 6566                 |
| GI          | none   | Score   | .97                  |
| Exons       | 5347..5692, 6358..6566   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22215  | Seq. ID | OJ990415_08.9922.C11 |

|          |  |        |         |
|----------|--|--------|---------|
| Gene No. | 46308  | Strand | +       |
| Start    | 18878  | End    | 24296   |
| Name     | OJ990415_08.9922.C11.o7.gs   | Method | GENSCAN |
| Start    | 18878  | End    | 24296   |
| GI       | none   | Score  | .63     |
| Exons    | 18878..18931, 19275..19538, 20599..20772, 21777..22320, 22922..23087, 23174..23332, 23729..24296 |        |         |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No.    | 46308  | Strand  | +                    |
| Start       | 18878  | End     | 24296                |
| Name        | OJ990415_08.9922.C11.o5.np   | Method  | AAT/NAP              |
| Start       | 19312  | End     | 24293                |
| GI          | 4938502  | Score   | 843                  |
| Exons       | 19312..19581, 20599..20745, 21804..22320, 22922..23087, 23174..23332, 23729..23894, 23988..24293 |         |                      |
| GI Descrip. | (AL078465) putative protein [Arabidopsis thaliana]   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215                                    | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46308                                    | Strand  | +                    |
| Start    | 18878                                    | End     | 24296                |
| Name     | OJ990415_08.9922.C11.o3.gp               | Method  | AAT/GAP              |
| Start    | 19444                                    | End     | 22053                |
| GI       | none                                     | Score   | 1003                 |
| Exons    | 19444..19538, 20599..20773, 21777..22053 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46309                      | Strand  | +                    |
| Start    | 24334                      | End     | 24623                |
| Name     | OJ990415_08.9922.C11.o4.gp | Method  | AAT/GAP              |
| Start    | 24334                      | End     | 24623                |
| GI       | 3107123                    | Score   | 458                  |
| Exons    | 24334..24623               |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22215   | Seq. ID | OJ990415_08.9922.C11 |
| Gene No.    | 46310   | Strand  | -                    |
| Start       | 1   | End     | 917                  |
| Name        | OJ990415_08.9922.C11.o1.np                                    | Method  | AAT/NAP              |
| Start       | 1   | End     | 818                  |
| GI          | 4678362   | Score   | 434                  |
| Exons       | 1..93, 320..818   |         |                      |
| GI Descrip. | (AL049659) protein kinase-like protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46310                      | Strand  | -                    |
| Start    | 1                          | End     | 917                  |
| Name     | OJ990415_08.9922.C11.o1.gs | Method  | GENSCAN              |
| Start    | 324                        | End     | 917                  |
| GI       | none                       | Score   | .45                  |
| Exons    | 324..917                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46311                      | Strand  | -                    |
| Start    | 1178                       | End     | 2070                 |
| Name     | OJ990415_08.9922.C11.o2.gs | Method  | GENSCAN              |
| Start    | 1178                       | End     | 2070                 |
| GI       | none                       | Score   | .92                  |



Exons 1178..1324, 2005..2070

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46312                      | Strand  | -                    |
| Start    | 2481                       | End     | 5894                 |
| Name     | OJ990415_08.9922.C11.o1.gp | Method  | AAT/GAP              |
| Start    | 2481                       | End     | 3159                 |
| GI       | none                       | Score   | 1298                 |
| Exons    | 2481..3159                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No.    | 46312  | Strand  | -                    |
| Start       | 2481   | End     | 5894                 |
| Name        | OJ990415_08.9922.C11.o2.np                     | Method  | AAT/NAP              |
| Start       | 2633   | End     | 5894                 |
| GI          | 3094014  | Score   | 210                  |
| Exons       | 2633..2723, 4090..4198, 5321..5424, 5838..5894 |         |                      |
| GI Descrip. | (AF060862) unknown [Homo sapiens]              |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46312                      | Strand  | -                    |
| Start    | 2481                       | End     | 5894                 |
| Name     | OJ990415_08.9922.C11.o2.gp | Method  | AAT/GAP              |
| Start    | 3750                       | End     | 4211                 |
| GI       | none                       | Score   | 885                  |
| Exons    | 3750..4211                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22215   | Seq. ID | OJ990415_08.9922.C11 |
| Gene No.    | 46313   | Strand  | -                    |
| Start       | 9918  | End     | 14513                |
| Name        | OJ990415_08.9922.C11.o3.np  | Method  | AAT/NAP              |
| Start       | 9918  | End     | 13564                |
| GI          | 6539581   | Score   | 471                  |
| Exons       | 9918..9970, 12265..13288, 13361..13564  |         |                      |
| GI Descrip. | (AP000837) Similar to Arabidopsis thaliana DNA chromosome 4, BAC clone F20D10; hypothetical protein (AL035538) [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22215   | Seq. ID | OJ990415_08.9922.C11 |
| Gene No.    | 46313   | Strand  | -                    |
| Start       | 9918  | End     | 14513                |
| Name        | OJ990415_08.9922.C11.o4.np                        | Method  | AAT/NAP              |
| Start       | 9977  | End     | 13201                |
| GI          | 6862929   | Score   | 283                  |
| Exons       | 9977..10088, 12260..12967, 13010..13201           |         |                      |
| GI Descrip. | (AC018907) unknown protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46313  | Strand  | -                    |
| Start    | 9918   | End     | 14513                |
| Name     | OJ990415_08.9922.C11.o5.gs   | Method  | GENSCAN              |
| Start    | 12223  | End     | 14513                |
| GI       | none   | Score   | .66                  |
| Exons    | 12223..12967, 13045..13319, 13419..13499, 13738..13994, 14396..14513 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22215 | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46314 | Strand  | -                    |

|       |                            |        |         |
|-------|----------------------------|--------|---------|
| Start | 25098                      | End    | 26908   |
| Name  | OJ990415_08.9922.C11.o8.gs | Method | GENSCAN |
| Start | 25098                      | End    | 26732   |
| GI    | none                       | Score  | .82     |
| Exons | 25098..26732               |        |         |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22215   | Seq. ID | OJ990415_08.9922.C11 |
| Gene No.    | 46314   | Strand  | -                    |
| Start       | 25098   | End     | 26908                |
| Name        | OJ990415_08.9922.C11.o6.np  | Method  | AAT/NAP              |
| Start       | 25101   | End     | 26346                |
| GI          | 4585920   | Score   | 1205                 |
| Exons       | 25101..26346  |         |                      |
| GI Descrip. | (AC007211) putative SCARECROW gene regulator [Arabidopsis thaliana] gi 6644392 gb AAF21044.1 AF210732_1 (AF210732) scarecrow-like 21 [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46314                      | Strand  | -                    |
| Start    | 25098                      | End     | 26908                |
| Name     | OJ990415_08.9922.C11.o5.gp | Method  | AAT/GAP              |
| Start    | 26329                      | End     | 26908                |
| GI       | none                       | Score   | 992                  |
| Exons    | 26329..26908               |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215                                  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315                                  | Strand  | -                    |
| Start    | 27466                                  | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o2.ts             | Method  | TBLASTX:Soybean      |
| Start    | 322                                    | End     | 773                  |
| GI       | none                                   | Score   | 166                  |
| Exons    | 322..570, 327..635, 639..773, 682..771 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215                                  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315                                  | Strand  | -                    |
| Start    | 27466                                  | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o3.tm             | Method  | TBLASTX:Maize        |
| Start    | 322                                    | End     | 773                  |
| GI       | none                                   | Score   | 166                  |
| Exons    | 322..570, 327..635, 639..773, 682..771 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315                      | Strand  | -                    |
| Start    | 27466                      | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o4.tc | Method  | TBLASTX:Cress        |
| Start    | 348                        | End     | 638                  |
| GI       | none                       | Score   | 100                  |
| Exons    | 348..638, 361..549         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315                      | Strand  | -                    |
| Start    | 27466                      | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o4.ts | Method  | TBLASTX:Soybean      |
| Start    | 12229                      | End     | 12648                |
| GI       | none                       | Score   | 103                  |
| Exons    | 12229..12648, 12359..12604 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315                      | Strand  | -                    |
| Start    | 27466                      | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o5.tm | Method  | TBLASTX:Maize        |
| Start    | 12325                      | End     | 12705                |
| GI       | none                       | Score   | 154                  |
| Exons    | 12325..12618, 12325..12705 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315  | Strand  | -                    |
| Start    | 27466  | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 19166  | End     | 20701                |
| GI       | none   | Score   | 39                   |
| Exons    | 19166..19189, 19166..19201, 19284..19373, 19285..19326, 19286..19381, 19287..19382, 19361..19534, 19419..19553, 19439..19525, 20597..20677, 20598..20675, 20598..20678, 20599..20676, 20672..20701 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315  | Strand  | -                    |
| Start    | 27466  | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o8.tm   | Method  | TBLASTX:Maize        |
| Start    | 20706  | End     | 22341                |
| GI       | none   | Score   | 88                   |
| Exons    | 20706..20756, 20710..20772, 21763..22053, 21773..22057, 21777..22061, 21806..22060, 22239..22310, 22239..22310, 22240..22341, 22241..22318 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315  | Strand  | -                    |
| Start    | 27466  | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 21918  | End     | 23786                |
| GI       | none   | Score   | 305                  |
| Exons    | 21918..22190, 21919..22194, 21920..22195, 21920..22216, 21921..22217, 22197..22226, 23270..23329, 23271..23333, 23727..23786 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315  | Strand  | -                    |
| Start    | 27466  | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 22046  | End     | 23846                |
| GI       | none   | Score   | 359                  |
| Exons    | 22046..22216, 22047..22283, 22062..22265, 23247..23333, 23249..23332, 23727..23786, 23769..23846 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315  | Strand  | -                    |
| Start    | 27466  | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o3.tc   | Method  | TBLASTX:Cress        |
| Start    | 22056  | End     | 23864                |
| GI       | none   | Score   | 83                   |
| Exons    | 22056..22232, 22057..22164, 22059..22253, 23270..23332, 23271..23333, 23727..23786, 23817..23864 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22215   | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315   | Strand  | -                    |
| Start    | 27466   | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 22061   | End     | 24324                |
| GI       | none  | Score   | 160                  |
| Exons    | 22061..22174, 22062..22181, 22161..22238, 22936..23043,<br>22952..23068, 23171..23332, 23172..23333, 23172..23333,<br>23692..23952, 23727..24317, 23729..24316, 23870..24322,<br>23974..24324 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215                                    | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315                                    | Strand  | -                    |
| Start    | 27466                                    | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o1.tc               | Method  | TBLASTX:Cress        |
| Start    | 25089                                    | End     | 25667                |
| GI       | none                                     | Score   | 143                  |
| Exons    | 25089..25667, 25210..25362, 25450..25641 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315                      | Strand  | -                    |
| Start    | 27466                      | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o6.tm | Method  | TBLASTX:Maize        |
| Start    | 25092                      | End     | 25280                |
| GI       | none                       | Score   | 234                  |
| Exons    | 25092..25280, 25098..25280 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22215   | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315   | Strand  | -                    |
| Start    | 27466   | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 25095   | End     | 26400                |
| GI       | none  | Score   | 143                  |
| Exons    | 25095..26222, 25225..25362, 25395..25700, 25456..26223,<br>26299..26400 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215                                    | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315                                    | Strand  | -                    |
| Start    | 27466                                    | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o3.tw               | Method  | TBLASTX:Wheat        |
| Start    | 25188                                    | End     | 25370                |
| GI       | none                                     | Score   | 168                  |
| Exons    | 25188..25355, 25188..25370, 25210..25362 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315  | Strand  | -                    |
| Start    | 27466  | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o2.tm                             | Method  | TBLASTX:Maize        |
| Start    | 25281  | End     | 26216                |
| GI       | none   | Score   | 92                   |
| Exons    | 25281..26216, 25428..25628, 25450..25638, 25873..26211 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315                      | Strand  | -                    |
| Start    | 27466                      | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 25437                      | End     | 25838                |

|          |  |         |                      |
|----------|--|---------|----------------------|
| GI       | none   | Score   | 171                  |
| Exons    | 25437..25838, 25462..25644, 25756..25821   |         |                      |
| Seq. No. | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315  | Strand  | -                    |
| Start    | 27466  | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 25815  | End     | 26216                |
| GI       | none   | Score   | 190                  |
| Exons    | 25815..26012, 25815..26021, 25816..26019, 26022..26216, 26026..26148, 26073..26201 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22215  | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315  | Strand  | -                    |
| Start    | 27466  | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 26219  | End     | 26745                |
| GI       | none   | Score   | 80                   |
| Exons    | 26219..26302, 26220..26306, 26221..26307, 26304..26372, 26305..26373, 26373..26423, 26400..26561, 26401..26559, 26590..26742, 26592..26738, 26629..26745 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22215                      | Seq. ID | OJ990415_08.9922.C11 |
| Gene No. | 46315                      | Strand  | -                    |
| Start    | 27466                      | End     | 27736                |
| Name     | OJ990415_08.9922.C11.o9.gs | Method  | GENSCAN              |
| Start    | 27466                      | End     | 27736                |
| GI       | none                       | Score   | .9                   |
| Exons    | 27466..27471, 27476..27736 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22216                      | Seq. ID | OJ990415_08.9922.C12 |
| Gene No. | 46316                      | Strand  | +                    |
| Start    | 82                         | End     | 177                  |
| Name     | OJ990415_08.9922.C12.o1.gs | Method  | GENSCAN              |
| Start    | 82                         | End     | 177                  |
| GI       | none                       | Score   | .83                  |
| Exons    | 82..177                    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22216                      | Seq. ID | OJ990415_08.9922.C12 |
| Gene No. | 46317                      | Strand  | -                    |
| Start    | 772                        | End     | 859                  |
| Name     | OJ990415_08.9922.C12.o1.gp | Method  | AAT/GAP              |
| Start    | 772                        | End     | 859                  |
| GI       | 5867_1.R1084               | Score   | 117                  |
| Exons    | 772..859                   |         |                      |

GI Descrip. '464986/sp|P35132|UBC9\_ARATH 5.0e-58 UBIQUITIN-CONJUGATING ENZYME E2-17 KD 9 (UBIQUITIN-PROTEIN LIGASE 9) (UBIQUITIN CARRIER PROTEIN 9) (UBCAT4B) >gi\_421857\_pir\_S32674 ubiquitin--protein ligase (EC 6.3.2.19) UBC9 - Arabidopsis thaliana >gi\_297884\_emb\_CAA78714\_(Z14990) ubiquitin conjugating enzyme homolog [Arabidopsis thaliana] >gi\_349211 (L00639) ubiquitin conjugating enzyme [Arabidopsis]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22217                      | Seq. ID | OJ990415_08.9922.C14 |
| Gene No. | 46318                      | Strand  | +                    |
| Start    | 156                        | End     | 7145                 |
| Name     | OJ990415_08.9922.C14.o1.gs | Method  | GENSCAN              |

|       |  |       |      |
|-------|--|-------|------|
| Start | 156  | End   | 7145 |
| GI    | none   | Score | .67  |
| Exons | 156..205, 232..321, 1058..1235, 1814..2240, 2554..2664, 3166..3206, 3240..3539, 3630..3847, 3975..4068, 4090..4163, 5175..5480, 5609..5753, 6571..6632, 6825..6904, 7029..7145 |       |      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22217  | Seq. ID | OJ990415_08.9922.C14 |
| Gene No.    | 46318  | Strand  | +                    |
| Start       | 156  | End     | 7145                 |
| Name        | OJ990415_08.9922.C14.o1.np                             | Method  | AAT/NAP              |
| Start       | 4015   | End     | 5575                 |
| GI          | 4755187  | Score   | 49                   |
| Exons       | 4015..4163, 5551..5575                                 |         |                      |
| GI Descrip. | (AC007018) hypothetical protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22218                      | Seq. ID | OJ990415_08.9922.C15 |
| Gene No. | 46319                      | Strand  | +                    |
| Start    | 532                        | End     | 1638                 |
| Name     | OJ990415_08.9922.C15.o1.gs | Method  | GENSCAN              |
| Start    | 532                        | End     | 1638                 |
| GI       | none                       | Score   | .45                  |
| Exons    | 532..614, 1377..1638       |         |                      |

|          |                                |         |                      |
|----------|--------------------------------|---------|----------------------|
| Seq. No. | 22219                          | Seq. ID | OJ990415_08.9922.C16 |
| Gene No. | 46320                          | Strand  | -                    |
| Start    | 454                            | End     | 1123                 |
| Name     | OJ990415_08.9922.C16.o1.gs     | Method  | GENSCAN              |
| Start    | 454                            | End     | 1123                 |
| GI       | none                           | Score   | .45                  |
| Exons    | 454..485, 600..709, 1022..1123 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22220                      | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46321                      | Strand  | +                    |
| Start    | 2203                       | End     | 2609                 |
| Name     | OJ990415_08.9922.C17.o1.gs | Method  | GENSCAN              |
| Start    | 2203                       | End     | 2609                 |
| GI       | none                       | Score   | .45                  |
| Exons    | 2203..2257, 2572..2609     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No.    | 46322  | Strand  | +                    |
| Start       | 4439   | End     | 7971                 |
| Name        | OJ990415_08.9922.C17.o1.np                             | Method  | AAT/NAP              |
| Start       | 4117   | End     | 6780                 |
| GI          | 4755187  | Score   | 329                  |
| Exons       | 4117..4175, 5894..6238, 6337..6513, 6607..6780         |         |                      |
| GI Descrip. | (AC007018) hypothetical protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46322  | Strand  | +                    |
| Start    | 4439   | End     | 7971                 |
| Name     | OJ990415_08.9922.C17.o2.gs   | Method  | GENSCAN              |
| Start    | 4439   | End     | 7971                 |
| GI       | none   | Score   | .61                  |
| Exons    | 4439..4446, 5498..5617, 5939..6126, 6339..6540, 6607..6780, 7612..7694, 7804..7870, 7950..7971 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No.    | 46323  | Strand  | +                    |
| Start       | 26617  | End     | 27120                |
| Name        | OJ990415_08.9922.C17.o4.np                             | Method  | AAT/NAP              |
| Start       | 26617  | End     | 27120                |
| GI          | 6721512  | Score   | 210                  |
| Exons       | 26617..26731, 26759..26893, 26933..26969, 27082..27120 |         |                      |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa]         |         |                      |

|          |                                       |         |                      |
|----------|---------------------------------------|---------|----------------------|
| Seq. No. | 22220                                 | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46324                                 | Strand  | -                    |
| Start    | 9600                                  | End     | 12667                |
| Name     | OJ990415_08.9922.C17.o1.gp            | Method  | AAT/GAP              |
| Start    | 9211                                  | End     | 10315                |
| GI       | none                                  | Score   | 1716                 |
| Exons    | 9211..9690, 9786..10165, 10284..10315 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22220   | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46324   | Strand  | -                    |
| Start    | 9600  | End     | 12667                |
| Name     | OJ990415_08.9922.C17.o3.gs  | Method  | GENSCAN              |
| Start    | 9600  | End     | 12667                |
| GI       | none  | Score   | .58                  |
| Exons    | 9600..9690, 9939..10165, 10305..10599, 10789..10973, 12404..12667 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325  | Strand  | -                    |
| Start    | 18785  | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o4.ts   | Method  | TBLASTX:Soybean      |
| Start    | 5928   | End     | 6778                 |
| GI       | none   | Score   | 79                   |
| Exons    | 5928..6047, 6442..6513, 6443..6511, 6604..6768, 6604..6768, 6611..6778, 6620..6775 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325  | Strand  | -                    |
| Start    | 18785  | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o3.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 6439   | End     | 6778                 |
| GI       | none   | Score   | 86                   |
| Exons    | 6439..6513, 6440..6511, 6611..6778, 6613..6768, 6620..6769 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325  | Strand  | -                    |
| Start    | 18785  | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 6447   | End     | 6778                 |
| GI       | none   | Score   | 83                   |
| Exons    | 6447..6518, 6449..6511, 6611..6778, 6613..6768 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22220                      | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325                      | Strand  | -                    |
| Start    | 18785                      | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 9849                       | End     | 10157                |
| GI       | none                       | Score   | 324                  |

Exons 9849..10157, 9854..10156

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325  | Strand  | -                    |
| Start    | 18785  | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 10293  | End     | 10814                |
| GI       | none   | Score   | 117                  |
| Exons    | 10293..10442, 10570..10698, 10572..10700, 10592..10699, 10594..10728, 10695..10805, 10695..10814 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325  | Strand  | -                    |
| Start    | 18785  | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o3.np   | Method  | AAT/NAP              |
| Start    | 18785  | End     | 27490                |
| GI       | 5922631  | Score   | 1324                 |
| Exons    | 18785..19491, 23424..24338, 24471..24614, 24657..25071, 27322..27490 |         |                      |

GI Descrip. (AP000492) ESTs C26347(C12145), AU078074(C12145) correspond to a region of the predicted gene.; similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativa] gi|6016864|dbj|BAA85207.1| (AP000570) ESTs C26347(C12145), AU078074(C12145) correspond to a region of the predicted gene.; Similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativ

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22220                      | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325                      | Strand  | -                    |
| Start    | 18785                      | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o5.tw | Method  | TBLASTX:Wheat        |
| Start    | 18798                      | End     | 19102                |
| GI       | none                       | Score   | 68                   |
| Exons    | 18798..19001, 19013..19102 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220                                    | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325                                    | Strand  | -                    |
| Start    | 18785                                    | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o3.ts               | Method  | TBLASTX:Soybean      |
| Start    | 19093                                    | End     | 19455                |
| GI       | none                                     | Score   | 38                   |
| Exons    | 19093..19455, 19184..19219, 19256..19429 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220                                    | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325                                    | Strand  | -                    |
| Start    | 18785                                    | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o1.tw               | Method  | TBLASTX:Wheat        |
| Start    | 19103                                    | End     | 19509                |
| GI       | none                                     | Score   | 242                  |
| Exons    | 19103..19495, 19103..19474, 19105..19509 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22220                      | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325                      | Strand  | -                    |
| Start    | 18785                      | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 19183                      | End     | 19539                |
| GI       | none                       | Score   | 128                  |



Exons 19183..19539, 19223..19495, 19483..19530

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22220                      | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325                      | Strand  | -                    |
| Start    | 18785                      | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 19594                      | End     | 19912                |
| GI       | none                       | Score   | 205                  |
| Exons    | 19594..19908, 19604..19912 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325  | Strand  | -                    |
| Start    | 18785  | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o2.tw                             | Method  | TBLASTX:Wheat        |
| Start    | 19624  | End     | 20033                |
| GI       | none   | Score   | 211                  |
| Exons    | 19624..19908, 19625..19885, 19910..20032, 19911..20033 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325  | Strand  | -                    |
| Start    | 18785  | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 20867  | End     | 24053                |
| GI       | none   | Score   | 60                   |
| Exons    | 20867..20959, 23316..23429, 23361..23450, 23362..23451, 23598..23834, 23608..23832, 23871..24053, 23872..24042 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22220  | Seq. ID | OJ990415_08.9922.C17 |
| Gene No. | 46325  | Strand  | -                    |
| Start    | 18785  | End     | 27490                |
| Name     | OJ990415_08.9922.C17.o4.tw                             | Method  | TBLASTX:Wheat        |
| Start    | 24687  | End     | 25034                |
| GI       | none   | Score   | 75                   |
| Exons    | 24687..24932, 24742..24915, 24921..25034, 24958..25011 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22221                                    | Seq. ID | OJ990415_08.9922.C18 |
| Gene No. | 46326                                    | Strand  | +                    |
| Start    | 39                                       | End     | 3103                 |
| Name     | OJ990415_08.9922.C18.o1.gs               | Method  | GENSCAN              |
| Start    | 39                                       | End     | 2911                 |
| GI       | none                                     | Score   | .55                  |
| Exons    | 39..73, 319..427, 1980..2133, 2865..2911 |         |                      |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22221                            | Seq. ID | OJ990415_08.9922.C18 |
| Gene No. | 46326                            | Strand  | +                    |
| Start    | 39                               | End     | 3103                 |
| Name     | OJ990415_08.9922.C18.o1.gp       | Method  | AAT/GAP              |
| Start    | 313                              | End     | 3103                 |
| GI       | 28754_1.R1084                    | Score   | 922                  |
| Exons    | 313..427, 1980..2133, 2865..3103 |         |                      |

GI Descrip. '3935169 5.0e-12 (AC004557) F17L21.12 [Arabidopsis thaliana]'

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22221                      | Seq. ID | OJ990415_08.9922.C18 |
| Gene No. | 46326                      | Strand  | +                    |
| Start    | 39                         | End     | 3103                 |
| Name     | OJ990415_08.9922.C18.o1.np | Method  | AAT/NAP              |
| Start    | 1977                       | End     | 2908                 |

GI 3935169 Score 209  
 Exons 1977..2133, 2865..2908  
 GI Descrip. (AC004557) F17L21.12 [Arabidopsis thaliana]

Seq. No. 22221 Seq. ID OJ990415\_08.9922.C18  
 Gene No. 46326 Strand +  
 Start 39 End 3103  
 Name OJ990415\_08.9922.C18.o1.tm Method TBLASTX:Maize  
 Start 1979 End 2142  
 GI none Score 180  
 Exons 1979..2134, 1979..2131, 1980..2132, 1981..2142

Seq. No. 22222 Seq. ID OJ990505\_02.9924.C1  
 Gene No. 46327 Strand +  
 Start 422 End 747  
 Name OJ990505\_02.9924.C1.o1.gp Method AAT/GAP  
 Start 422 End 747  
 GI none Score 627  
 Exons 422..747

Seq. No. 22223 Seq. ID OJ990505\_02.9924.C2  
 Gene No. 46328 Strand +  
 Start 77 End 5041  
 Name OJ990505\_02.9924.C2.o1.gp Method AAT/GAP  
 Start 77 End 5041  
 GI 2170\_1.R1084 Score 1567  
 Exons 77..124, 3656..3745, 3864..3952, 4425..5041  
 GI Descrip. '136640/sp|P25866|UBC2\_WHEAT 9.0e-86 UBIQUITIN-CONJUGATING  
 ENZYME E2-17 KD (UBIQUITIN-PROTEIN LIGASE) (UBIQUITIN CARRIER  
 PROTEIN) >gi\_170785 (M62720) ubiquitin carrier protein [Triticum  
 aestivum]'

Seq. No. 22223 Seq. ID OJ990505\_02.9924.C2  
 Gene No. 46328 Strand +  
 Start 77 End 5041  
 Name OJ990505\_02.9924.C2.o1.np Method AAT/NAP  
 Start 98 End 4550  
 GI 136640 Score 466  
 Exons 98..124, 3656..3745, 3864..3952, 4425..4550  
 GI Descrip. UBIQUITIN-CONJUGATING ENZYME E2-17 KD (UBIQUITIN-PROTEIN LIGASE)  
 (UBIQUITIN CARRIER PROTEIN) gi|170785 (M62720) ubiquitin carrier  
 protein [Triticum aestivum]

Seq. No. 22223 Seq. ID OJ990505\_02.9924.C2  
 Gene No. 46329 Strand -  
 Start 4801 End 9219  
 Name OJ990505\_02.9924.C2.o1.tw Method TBLASTX:Wheat  
 Start 100 End 4622  
 GI none Score 60  
 Exons 100..126, 3634..3744, 3645..3743, 3653..3745, 3655..3744,  
 3856..3948, 3860..3952, 3865..3948, 4419..4622, 4422..4553,  
 4424..4564

Seq. No. 22223 Seq. ID OJ990505\_02.9924.C2  
 Gene No. 46329 Strand -  
 Start 4801 End 9219  
 Name OJ990505\_02.9924.C2.o3.ts Method TBLASTX:Soybean

|       |  |       |      |
|-------|--|-------|------|
| Start | 100  | End   | 4559 |
| GI    | none   | Score | 60   |
| Exons | 100..126, 4419..4556, 4424..4555, 4428..4559 |       |      |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22223  | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329  | Strand  | -                   |
| Start    | 4801   | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o2.tc  | Method  | TBLASTX:Cress       |
| Start    | 3634   | End     | 4541                |
| GI       | none   | Score   | 88                  |
| Exons    | 3634..3744, 3654..3743, 3655..3744, 3662..3757, 3711..3746, 3860..3952, 3863..3931, 3865..3948, 4419..4541, 4424..4537 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22223  | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329  | Strand  | -                   |
| Start    | 4801   | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 3637   | End     | 3962                |
| GI       | none   | Score   | 93                  |
| Exons    | 3637..3756, 3654..3743, 3655..3747, 3711..3767, 3845..3955, 3847..3960, 3861..3962, 3862..3960 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22223  | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329  | Strand  | -                   |
| Start    | 4801   | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o5.tm  | Method  | TBLASTX:Maize       |
| Start    | 3651   | End     | 4621                |
| GI       | none   | Score   | 103                 |
| Exons    | 3651..3743, 3652..3744, 3652..3744, 3711..3746, 3860..3952, 3868..3948, 4419..4568, 4422..4565, 4423..4575, 4424..4621 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22223  | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329  | Strand  | -                   |
| Start    | 4801   | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o2.gs  | Method  | GENSCAN             |
| Start    | 4801   | End     | 8719                |
| GI       | none   | Score   | .61                 |
| Exons    | 4801..5008, 5487..5779, 5894..6005, 6112..6173, 6233..6441, 6551..6791, 7108..7241, 7360..8719 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22223  | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329  | Strand  | -                   |
| Start    | 4801   | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o2.np  | Method  | AAT/NAP             |
| Start    | 5440   | End     | 9219                |
| GI       | 6006864  | Score   | 1702                |
| Exons    | 5440..5779, 5897..6021, 6212..6441, 6551..6791, 7108..7241, 7360..8676, 9174..9219 |         |                     |

GI Descrip. (AC009540) hypothetical protein [Arabidopsis thaliana]

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22223   | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329   | Strand  | -                   |
| Start    | 4801  | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o3.tm                                   | Method  | TBLASTX:Maize       |
| Start    | 5529  | End     | 6310                |
| GI       | none  | Score   | 169                 |
| Exons    | 5529..5711, 5529..5735, 5530..5775, 5531..5773, 5567..5779, |         |                     |

5891..6007, 5892..6008, 5896..6012, 6112..6153, 6233..6310,  
6234..6308, 6242..6310

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22223                              | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329                              | Strand  | -                   |
| Start    | 4801                               | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o3.tc          | Method  | TBLASTX:Cress       |
| Start    | 5576                               | End     | 5992                |
| GI       | none                               | Score   | 102                 |
| Exons    | 5576..5782, 5598..5705, 5897..5992 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22223                              | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329                              | Strand  | -                   |
| Start    | 4801                               | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o4.ts          | Method  | TBLASTX:Soybean     |
| Start    | 6242                               | End     | 6794                |
| GI       | none                               | Score   | 104                 |
| Exons    | 6242..6439, 6555..6611, 6636..6794 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22223  | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329  | Strand  | -                   |
| Start    | 4801   | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o4.tc                      | Method  | TBLASTX:Cress       |
| Start    | 6308   | End     | 7242                |
| GI       | none   | Score   | 102                 |
| Exons    | 6308..6442, 6552..6626, 6636..6791, 7117..7242 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22223   | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329   | Strand  | -                   |
| Start    | 4801  | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o2.tm   | Method  | TBLASTX:Maize       |
| Start    | 6311  | End     | 7411                |
| GI       | none  | Score   | 90                  |
| Exons    | 6311..6394, 6311..6442, 6315..6440, 6316..6495, 6549..6596,<br>6552..6596, 6553..6597, 6597..6794, 6601..6792, 6602..6805,<br>6641..6802, 7103..7237, 7105..7245, 7105..7239, 7352..7411,<br>7360..7395 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22223  | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329  | Strand  | -                   |
| Start    | 4801   | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o4.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 7583   | End     | 7909                |
| GI       | none   | Score   | 81                  |
| Exons    | 7583..7681, 7584..7646, 7698..7904, 7700..7909, 7703..7903 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22223  | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329  | Strand  | -                   |
| Start    | 4801   | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o1.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 7706   | End     | 8368                |
| GI       | none   | Score   | 61                  |
| Exons    | 7706..8224, 7710..7907, 7959..8018, 8207..8368 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22223 | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329 | Strand  | -                   |
| Start    | 4801  | End     | 9219                |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990505_02.9924.C2.o1.tc                      | Method | TBLASTX:Cress |
| Start | 7790   | End    | 8212          |
| GI    | none   | Score  | 55            |
| Exons | 7790..7927, 7791..7874, 7916..8212, 7944..8210 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22223  | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329  | Strand  | -                   |
| Start    | 4801   | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 7934   | End     | 8570                |
| GI       | none   | Score   | 280                 |
| Exons    | 7934..8467, 7935..8273, 8316..8480, 8447..8551, 8451..8552, 8529..8570 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22223  | Seq. ID | OJ990505_02.9924.C2 |
| Gene No.    | 46329  | Strand  | -                   |
| Start       | 4801   | End     | 9219                |
| Name        | OJ990505_02.9924.C2.o2.gp  | Method  | AAT/GAP             |
| Start       | 8241   | End     | 8727                |
| GI          | uC-osroM202018d10b1  | Score   | 958                 |
| Exons       | 8241..8727   |         |                     |
| GI Descrip. | '4521193/dbj AB013450.1 AB013450 3.0e-21 Oryza sativa DNA, similar sequence to Pib gene' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22223                     | Seq. ID | OJ990505_02.9924.C2 |
| Gene No. | 46329                     | Strand  | -                   |
| Start    | 4801                      | End     | 9219                |
| Name     | OJ990505_02.9924.C2.o3.gp | Method  | AAT/GAP             |
| Start    | 8917                      | End     | 9172                |
| GI       | 568697                    | Score   | 224                 |
| Exons    | 8917..8987, 9100..9172    |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22224   | Seq. ID | OJ990505_02.9924.C3 |
| Gene No.    | 46330   | Strand  | +                   |
| Start       | 7766  | End     | 11690               |
| Name        | OJ990505_02.9924.C3.o1.gp   | Method  | AAT/GAP             |
| Start       | 7766  | End     | 9899                |
| GI          | 51993_1.R1084   | Score   | 905                 |
| Exons       | 7766..7893, 8935..9175, 9789..9899  |         |                     |
| GI Descrip. | '3157951 6.0e-29 (AC002131) Contains similarity to vesicle trafficking protein gb_U91538 from Mus musculus. ESTs gb_F15494 and gb_F14097 come from this gene. [Arabidopsis thaliana]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22224  | Seq. ID | OJ990505_02.9924.C3 |
| Gene No. | 46330  | Strand  | +                   |
| Start    | 7766   | End     | 11690               |
| Name     | OJ990505_02.9924.C3.o3.gs  | Method  | GENSCAN             |
| Start    | 8092   | End     | 10663               |
| GI       | none   | Score   | .74                 |
| Exons    | 8092..8109, 8213..8422, 8762..8861, 8935..9190, 9789..9949, 10033..10179, 10647..10663 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22224                     | Seq. ID | OJ990505_02.9924.C3 |
| Gene No. | 46330                     | Strand  | +                   |
| Start    | 7766                      | End     | 11690               |
| Name     | OJ990505_02.9924.C3.o2.np | Method  | AAT/NAP             |
| Start    | 8988                      | End     | 11328               |

GI 3157951 Score 874  
 Exons 8988..9175, 9647..9949, 10033..10179, 10531..10607, 11248..11328  
 GI Descrip. (AC002131) Contains similarity to vesicle trafficking protein  
 gb|U91538 from Mus musculus. ESTs gb|F15494 and gb|F14097 come  
 from this gene. [Arabidopsis thaliana]

Seq. No. 22224 Seq. ID OJ990505\_02.9924.C3  
 Gene No. 46330 Strand +  
 Start 7766 End 11690  
 Name OJ990505\_02.9924.C3.o2.gp Method AAT/GAP  
 Start 10069 End 10649  
 GI 2796671 Score 319  
 Exons 10069..10179, 10531..10649  
 GI Descrip. 3157951 6.0e-29 (AC002131) Contains similarity to vesicle  
 trafficking protein gb\_U91538 from Mus musculus.. ESTs gb\_F15494  
 and gb\_F14097 come from this gene. [Arabidopsis thaliana]

Seq. No. 22224 Seq. ID OJ990505\_02.9924.C3  
 Gene No. 46330 Strand +  
 Start 7766 End 11690  
 Name OJ990505\_02.9924.C3.o3.gp Method AAT/GAP  
 Start 11226 End 11690  
 GI none Score 806  
 Exons 11226..11690

Seq. No. 22224 Seq. ID OJ990505\_02.9924.C3  
 Gene No. 46331 Strand -  
 Start 233 End 3114  
 Name OJ990505\_02.9924.C3.o1.gs Method GENSCAN  
 Start 233 End 3114  
 GI none Score .53  
 Exons 233..544, 1903..2027, 2379..2514, 2791..3114

Seq. No. 22224 Seq. ID OJ990505\_02.9924.C3  
 Gene No. 46332 Strand -  
 Start 4808 End 7325  
 Name OJ990505\_02.9924.C3.o2.gs Method GENSCAN  
 Start 4808 End 7325  
 GI none Score .53  
 Exons 4808..4999, 5169..5275, 5908..6005, 6603..6784, 7179..7325

Seq. No. 22224 Seq. ID OJ990505\_02.9924.C3  
 Gene No. 46332 Strand -  
 Start 4808 End 7325  
 Name OJ990505\_02.9924.C3.o1.np Method AAT/NAP  
 Start 5168 End 6655  
 GI 5852093 Score 77  
 Exons 5168..5275, 6567..6655  
 GI Descrip. (AL117264) zwh16.1 [Oryza sativa]

Seq. No. 22224 Seq. ID OJ990505\_02.9924.C3  
 Gene No. 46333 Strand -  
 Start 12176 End 12665  
 Name OJ990505\_02.9924.C3.o2.tm Method TBLASTX:Maize  
 Start 5824 End 6413  
 GI none Score 72  
 Exons 5824..5925, 5937..6185, 5951..6055, 5955..6143, 6261..6413

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22224  | Seq. ID | OJ990505_02.9924.C3 |
| Gene No. | 46333  | Strand  | -                   |
| Start    | 12176  | End     | 12665               |
| Name     | OJ990505_02.9924.C3.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 8952   | End     | 10181               |
| GI       | none   | Score   | 272                 |
| Exons    | 8952..9062, 8985..9179, 9083..9163, 9785..9865, 9789..9866, 9790..9867, 9877..9897, 9901..9963, 9907..9948, 10012..10179, 10014..10181, 10014..10172, 10036..10179 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22224  | Seq. ID | OJ990505_02.9924.C3 |
| Gene No. | 46333  | Strand  | -                   |
| Start    | 12176  | End     | 12665               |
| Name     | OJ990505_02.9924.C3.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 8973   | End     | 10613               |
| GI       | none   | Score   | 325                 |
| Exons    | 8973..9179, 8973..9062, 8974..9186, 8974..9168, 9123..9179, 9785..9952, 9789..9956, 9789..9956, 9790..9963, 10014..10181, 10014..10178, 10021..10203, 10036..10179, 10517..10603, 10524..10613, 10530..10607, 10531..10608 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22224                     | Seq. ID | OJ990505_02.9924.C3 |
| Gene No. | 46333                     | Strand  | -                   |
| Start    | 12176                     | End     | 12665               |
| Name     | OJ990505_02.9924.C3.o1.ts | Method  | TBLASTX:Soybean     |
| Start    | 8979                      | End     | 9179                |
| GI       | none                      | Score   | 289                 |
| Exons    | 8979..9179, 8987..9175    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22224  | Seq. ID | OJ990505_02.9924.C3 |
| Gene No. | 46333  | Strand  | -                   |
| Start    | 12176  | End     | 12665               |
| Name     | OJ990505_02.9924.C3.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 9789   | End     | 11331               |
| GI       | none   | Score   | 93                  |
| Exons    | 9789..9959, 9789..9956, 9790..9963, 9811..9957, 10012..10173, 10014..10181, 10014..10172, 10524..10613, 11223..11330, 11245..11331 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22224  | Seq. ID | OJ990505_02.9924.C3 |
| Gene No. | 46333  | Strand  | -                   |
| Start    | 12176  | End     | 12665               |
| Name     | OJ990505_02.9924.C3.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 11233  | End     | 11475               |
| GI       | none   | Score   | 115                 |
| Exons    | 11233..11355, 11235..11357, 11238..11357, 11239..11358, 11246..11359, 11411..11473, 11415..11474, 11416..11472, 11416..11475 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22224                      | Seq. ID | OJ990505_02.9924.C3 |
| Gene No. | 46333                      | Strand  | -                   |
| Start    | 12176                      | End     | 12665               |
| Name     | OJ990505_02.9924.C3.o4.gp  | Method  | AAT/GAP             |
| Start    | 12176                      | End     | 12665               |
| GI       | 5038658                    | Score   | 580                 |
| Exons    | 12176..12409, 12588..12665 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22225  | Seq. ID | OJ990505_02.9924.C4 |
| Gene No.    | 46334  | Strand  | +                   |
| Start       | 1  | End     | 768                 |
| Name        | OJ990505_02.9924.C4.ol.np                      | Method  | AAT/NAP             |
| Start       | 1  | End     | 768                 |
| GI          | 6006359  | Score   | 74                  |
| Exons       | 1..147, 750..768                               |         |                     |
| GI Descrip. | (AP000559) hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22226                     | Seq. ID | OJ990505_02.9924.C6 |
| Gene No. | 46335                     | Strand  | +                   |
| Start    | 492                       | End     | 626                 |
| Name     | OJ990505_02.9924.C6.ol.gs | Method  | GENSCAN             |
| Start    | 492                       | End     | 626                 |
| GI       | none                      | Score   | .81                 |
| Exons    | 492..626                  |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22226  | Seq. ID | OJ990505_02.9924.C6 |
| Gene No.    | 46336  | Strand  | +                   |
| Start       | 540  | End     | 778                 |
| Name        | OJ990505_02.9924.C6.ol.gp  | Method  | AAT/GAP             |
| Start       | 540  | End     | 778                 |
| GI          | 3760742  | Score   | 447                 |
| Exons       | 540..778   |         |                     |
| GI Descrip. | 4521193/dbj AB013450.1 AB013450 3.0e-21 Oryza sativa DNA, similar sequence to Pib gene |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22227                                  | Seq. ID | OJ990505_02.9924.C7 |
| Gene No.    | 46337                                  | Strand  | +                   |
| Start       | 1                                      | End     | 640                 |
| Name        | OJ990505_02.9924.C7.ol.np              | Method  | AAT/NAP             |
| Start       | 1                                      | End     | 640                 |
| GI          | 2589164                                | Score   | 516                 |
| Exons       | 1..329, 414..640                       |         |                     |
| GI Descrip. | (D88452) aldehyde oxidase-2 [Zea mays] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22227  | Seq. ID | OJ990505_02.9924.C7 |
| Gene No. | 46337  | Strand  | +                   |
| Start    | 1  | End     | 640                 |
| Name     | OJ990505_02.9924.C7.ol.tc                                  | Method  | TBLASTX:Cress       |
| Start    | 118  | End     | 601                 |
| GI       | none   | Score   | 55                  |
| Exons    | 118..282, 137..328, 142..327, 413..493, 505..600, 506..601 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22227  | Seq. ID | OJ990505_02.9924.C7 |
| Gene No. | 46337  | Strand  | +                   |
| Start    | 1  | End     | 640                 |
| Name     | OJ990505_02.9924.C7.ol.tm  | Method  | TBLASTX:Maize       |
| Start    | 120  | End     | 604                 |
| GI       | none   | Score   | 310                 |
| Exons    | 120..272, 124..360, 137..328, 413..511, 449..496, 499..603, 500..604 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22227 | Seq. ID | OJ990505_02.9924.C7 |
| Gene No. | 46337 | Strand  | +                   |
| Start    | 1     | End     | 640                 |



|             |   |         |                      |
|-------------|---|---------|----------------------|
| Name        | OJ990505_02.9924.C7.ol.gs   | Method  | GENSCAN              |
| Start       | 140   | End     | 626                  |
| GI          | none  | Score   | .89                  |
| Exons       | 140..329, 414..626  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22227   | Seq. ID | OJ990505_02.9924.C7  |
| Gene No.    | 46337   | Strand  | +                    |
| Start       | 1   | End     | 640                  |
| Name        | OJ990505_02.9924.C7.ol.ts   | Method  | TBLASTX:Soybean      |
| Start       | 260   | End     | 601                  |
| GI          | none  | Score   | 81                   |
| Exons       | 260..328, 413..493, 520..591, 521..601  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22228   | Seq. ID | OJ990505_02.9924.C8  |
| Gene No.    | 46338   | Strand  | +                    |
| Start       | 1   | End     | 95                   |
| Name        | OJ990505_02.9924.C8.ol.gp   | Method  | AAT/GAP              |
| Start       | 1   | End     | 95                   |
| GI          | 69953_1.R1084   | Score   | 132                  |
| Exons       | 1..95   |         |                      |
| GI Descrip. | '5295936/dbj AB026295.2 AB026295 7.0e-34 Oryza sativa genomic DNA, chromosome 6, clone:P0681F10, complete sequence' |         |                      |
|             |   |         |                      |
| Seq. No.    | 22228   | Seq. ID | OJ990505_02.9924.C8  |
| Gene No.    | 46339   | Strand  | -                    |
| Start       | 388   | End     | 437                  |
| Name        | OJ990505_02.9924.C8.ol.gs   | Method  | GENSCAN              |
| Start       | 388   | End     | 437                  |
| GI          | none  | Score   | .81                  |
| Exons       | 388..437  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22229   | Seq. ID | OJ990505_02.9924.C9  |
| Gene No.    | 46340   | Strand  | +                    |
| Start       | 582   | End     | 1504                 |
| Name        | OJ990505_02.9924.C9.ol.gs   | Method  | GENSCAN              |
| Start       | 582   | End     | 1484                 |
| GI          | none  | Score   | .52                  |
| Exons       | 582..735, 1378..1484  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22229   | Seq. ID | OJ990505_02.9924.C9  |
| Gene No.    | 46340   | Strand  | +                    |
| Start       | 582   | End     | 1504                 |
| Name        | OJ990505_02.9924.C9.ol.np   | Method  | AAT/NAP              |
| Start       | 591   | End     | 1504                 |
| GI          | 2589164   | Score   | 164                  |
| Exons       | 591..738, 1484..1504  |         |                      |
| GI Descrip. | (D88452) aldehyde oxidase-2 [Zea mays]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22230   | Seq. ID | OJ990505_02.9924.C10 |
| Gene No.    | 46341   | Strand  | +                    |
| Start       | 1490  | End     | 1918                 |
| Name        | OJ990505_02.9924.C10.ol.tc  | Method  | TBLASTX:Cress        |
| Start       | 1466  | End     | 1916                 |
| GI          | none  | Score   | 296                  |
| Exons       | 1466..1756, 1527..1760, 1773..1916, 1799..1915  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22230   | Seq. ID | OJ990505_02.9924.C10 |

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 46341                                  | Strand | +       |
| Start       | 1490                                   | End    | 1918    |
| Name        | OJ990505_02.9924.C10.o1.np             | Method | AAT/NAP |
| Start       | 1490                                   | End    | 1918    |
| GI          | 2589164                                | Score  | 598     |
| Exons       | 1490..1918                             |        |         |
| GI Descrip. | (D88452) aldehyde oxidase-2 [Zea mays] |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22230                      | Seq. ID | OJ990505_02.9924.C10 |
| Gene No. | 46341                      | Strand  | +                    |
| Start    | 1490                       | End     | 1918                 |
| Name     | OJ990505_02.9924.C10.o1.gs | Method  | GENSCAN              |
| Start    | 1495                       | End     | 1895                 |
| GI       | none                       | Score   | .56                  |
| Exons    | 1495..1895                 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22230  | Seq. ID | OJ990505_02.9924.C10 |
| Gene No. | 46341  | Strand  | +                    |
| Start    | 1490   | End     | 1918                 |
| Name     | OJ990505_02.9924.C10.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 1605   | End     | 1872                 |
| GI       | none   | Score   | 342                  |
| Exons    | 1605..1862, 1610..1852, 1829..1870, 1830..1871, 1831..1872 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22231   | Seq. ID | OJ990505_02.9924.C11 |
| Gene No.    | 46342   | Strand  | +                    |
| Start       | 1   | End     | 1859                 |
| Name        | OJ990505_02.9924.C11.o1.np                          | Method  | AAT/NAP              |
| Start       | 1   | End     | 1859                 |
| GI          | 2589162   | Score   | 1261                 |
| Exons       | 1..372, 474..736, 857..1066, 1283..1501, 1799..1859 |         |                      |
| GI Descrip. | (D88451) aldehyde oxidase [Zea mays]                |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22231   | Seq. ID | OJ990505_02.9924.C11 |
| Gene No. | 46342   | Strand  | +                    |
| Start    | 1   | End     | 1859                 |
| Name     | OJ990505_02.9924.C11.o1.tc  | Method  | TBLASTX:Cress        |
| Start    | 3   | End     | 1528                 |
| GI       | none  | Score   | 132                  |
| Exons    | 3..248, 282..374, 287..373, 470..658, 472..654, 842..1069, 859..1053, 911..1072, 1268..1528, 1280..1507 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22231                                    | Seq. ID | OJ990505_02.9924.C11 |
| Gene No. | 46342                                    | Strand  | +                    |
| Start    | 1  | End     | 1859                 |
| Name     | OJ990505_02.9924.C11.o1.gs               | Method  | GENSCAN              |
| Start    | 67                                       | End     | 1501                 |
| GI       | none                                     | Score   | .84                  |
| Exons    | 67..372, 474..736, 857..1066, 1283..1501 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22231  | Seq. ID | OJ990505_02.9924.C11 |
| Gene No. | 46342  | Strand  | +                    |
| Start    | 1  | End     | 1859                 |
| Name     | OJ990505_02.9924.C11.o1.tm                               | Method  | TBLASTX:Maize        |
| Start    | 94   | End     | 1531                 |
| GI       | none   | Score   | 95                   |
| Exons    | 94..153, 95..160, 96..161, 154..369, 168..374, 168..368, |         |                      |

169..369, 170..373, 468..653, 470..739, 471..548, 472..735,  
837..1052, 851..1069, 856..1068, 1268..1507, 1280..1531

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22231  | Seq. ID | OJ990505_02.9924.C11 |
| Gene No. | 46342  | Strand  | +                    |
| Start    | 1  | End     | 1859                 |
| Name     | OJ990505_02.9924.C11.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 677  | End     | 1321                 |
| GI       | none   | Score   | 95                   |
| Exons    | 677..739, 677..736, 837..1052, 843..1052, 845..1069, 845..1054,<br>856..1068, 1269..1319, 1270..1320, 1280..1321, 1280..1318 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22231   | Seq. ID | OJ990505_02.9924.C11 |
| Gene No. | 46342   | Strand  | +                    |
| Start    | 1   | End     | 1859                 |
| Name     | OJ990505_02.9924.C11.o1.ts                              | Method  | TBLASTX:Soybean      |
| Start    | 857   | End     | 1483                 |
| GI       | none  | Score   | 224                  |
| Exons    | 857..1069, 858..1052, 859..1065, 1267..1461, 1268..1483 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22231   | Seq. ID | OJ990505_02.9924.C11 |
| Gene No.    | 46342   | Strand  | +                    |
| Start       | 1   | End     | 1859                 |
| Name        | OJ990505_02.9924.C11.o1.gp  | Method  | AAT/GAP              |
| Start       | 885   | End     | 1525                 |
| GI          | 12055_1.R1084   | Score   | 713                  |
| Exons       | 885..1066, 1283..1525   |         |                      |
| GI Descrip. | '2589162/dbj BAA23226  2.0e-47 (D88451) aldehyde oxidase [Zea mays].' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22232                                  | Seq. ID | OJ990505_02.9924.C12 |
| Gene No.    | 46343                                  | Strand  | +                    |
| Start       | 1                                      | End     | 1024                 |
| Name        | OJ990505_02.9924.C12.o1.np             | Method  | AAT/NAP              |
| Start       | 1                                      | End     | 1024                 |
| GI          | 2589164                                | Score   | 861                  |
| Exons       | 1..613, 801..896, 967..1024            |         |                      |
| GI Descrip. | (D88452) aldehyde oxidase-2 [Zea mays] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22232                      | Seq. ID | OJ990505_02.9924.C12 |
| Gene No. | 46343                      | Strand  | +                    |
| Start    | 1                          | End     | 1024                 |
| Name     | OJ990505_02.9924.C12.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 22                         | End     | 899                  |
| GI       | none                       | Score   | 475                  |
| Exons    | 22..573, 23..580, 798..899 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22232                      | Seq. ID | OJ990505_02.9924.C12 |
| Gene No. | 46343                      | Strand  | +                    |
| Start    | 1                          | End     | 1024                 |
| Name     | OJ990505_02.9924.C12.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 23                         | End     | 163                  |
| GI       | none                       | Score   | 193                  |
| Exons    | 23..163, 25..162           |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22232 | Seq. ID | OJ990505_02.9924.C12 |
| Gene No. | 46343 | Strand  | +                    |

|       |                            |        |         |
|-------|----------------------------|--------|---------|
| Start | 1                          | End    | 1024    |
| Name  | OJ990505_02.9924.C12.o1.gs | Method | GENSCAN |
| Start | 61                         | End    | 896     |
| GI    | none                       | Score  | .88     |
| Exons | 61..613, 801..896          |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22232  | Seq. ID | OJ990505_02.9924.C12 |
| Gene No. | 46343  | Strand  | +                    |
| Start    | 1  | End     | 1024                 |
| Name     | OJ990505_02.9924.C12.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 163  | End     | 931                  |
| GI       | none   | Score   | 527                  |
| Exons    | 163..588, 164..574, 566..625, 577..627, 753..899, 797..931, 798..899 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22232  | Seq. ID | OJ990505_02.9924.C12 |
| Gene No. | 46343  | Strand  | +                    |
| Start    | 1  | End     | 1024                 |
| Name     | OJ990505_02.9924.C12.o1.ts                       | Method  | TBLASTX:Soybean      |
| Start    | 308  | End     | 899                  |
| GI       | none   | Score   | 288                  |
| Exons    | 308..577, 350..577, 361..390, 433..579, 798..899 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22232  | Seq. ID | OJ990505_02.9924.C12 |
| Gene No. | 46343  | Strand  | +                    |
| Start    | 1  | End     | 1024                 |
| Name     | OJ990505_02.9924.C12.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 311  | End     | 904                  |
| GI       | none   | Score   | 148                  |
| Exons    | 311..412, 358..387, 419..574, 433..573, 442..576, 528..620, 586..627, 591..614, 798..899, 799..900, 800..904 |         |                      |

|             |                                   |         |                      |
|-------------|-----------------------------------|---------|----------------------|
| Seq. No.    | 22233                             | Seq. ID | OJ990505_02.9924.C13 |
| Gene No.    | 46344                             | Strand  | +                    |
| Start       | 1                                 | End     | 1344                 |
| Name        | OJ990505_02.9924.C13.o1.np        | Method  | AAT/NAP              |
| Start       | 1                                 | End     | 1344                 |
| GI          | 5852093                           | Score   | 69                   |
| Exons       | 1..73, 983..1089, 1260..1344      |         |                      |
| GI Descrip. | (AL117264) zwh16.1 [Oryza sativa] |         |                      |

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 22233                                | Seq. ID | OJ990505_02.9924.C13 |
| Gene No. | 46344                                | Strand  | +                    |
| Start    | 1                                    | End     | 1344                 |
| Name     | OJ990505_02.9924.C13.o1.tm           | Method  | TBLASTX:Maize        |
| Start    | 88                                   | End     | 407                  |
| GI       | none                                 | Score   | 108                  |
| Exons    | 88..276, 88..294, 176..280, 306..407 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22234                      | Seq. ID | OJ990505_02.9924.C14 |
| Gene No. | 46345                      | Strand  | -                    |
| Start    | 221                        | End     | 549                  |
| Name     | OJ990505_02.9924.C14.o1.gs | Method  | GENSCAN              |
| Start    | 221                        | End     | 549                  |
| GI       | none                       | Score   | .48                  |
| Exons    | 221..248, 512..549         |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22235   | Seq. ID | OJ990505_02.9924.C17 |
| Gene No.    | 46346   | Strand  | -                    |
| Start       | 765   | End     | 1293                 |
| Name        | OJ990505_02.9924.C17.o1.gs  | Method  | GENSCAN              |
| Start       | 765   | End     | 1293                 |
| GI          | none  | Score   | .43                  |
| Exons       | 765..870, 1125..1293  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22236   | Seq. ID | OJ990505_02.9924.C18 |
| Gene No.    | 46347   | Strand  | +                    |
| Start       | 775   | End     | 1206                 |
| Name        | OJ990505_02.9924.C18.o1.np  | Method  | AAT/NAP              |
| Start       | 775   | End     | 1206                 |
| GI          | 1906000   | Score   | 88                   |
| Exons       | 775..958, 1077..1206  |         |                      |
| GI Descrip. | (U90428) blue copper-binding protein II [Arabidopsis thaliana]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22236   | Seq. ID | OJ990505_02.9924.C18 |
| Gene No.    | 46347   | Strand  | +                    |
| Start       | 775   | End     | 1206                 |
| Name        | OJ990505_02.9924.C18.o1.gs  | Method  | GENSCAN              |
| Start       | 796   | End     | 1186                 |
| GI          | none  | Score   | .71                  |
| Exons       | 796..958, 1077..1186  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22237   | Seq. ID | OJ990505_02.9924.C20 |
| Gene No.    | 46348   | Strand  | +                    |
| Start       | 1   | End     | 1610                 |
| Name        | OJ990505_02.9924.C20.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1610                 |
| GI          | 2589162   | Score   | 1918                 |
| Exons       | 1..1610   |         |                      |
| GI Descrip. | (D88451) aldehyde oxidase [Zea mays]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22237   | Seq. ID | OJ990505_02.9924.C20 |
| Gene No.    | 46348   | Strand  | +                    |
| Start       | 1   | End     | 1610                 |
| Name        | OJ990505_02.9924.C20.o1.gs  | Method  | GENSCAN              |
| Start       | 56  | End     | 1437                 |
| GI          | none  | Score   | .41                  |
| Exons       | 56..1437  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22237   | Seq. ID | OJ990505_02.9924.C20 |
| Gene No.    | 46349   | Strand  | -                    |
| Start       | 1369  | End     | 1568                 |
| Name        | OJ990505_02.9924.C20.o1.tc  | Method  | TBLASTX:Cress        |
| Start       | 6   | End     | 1567                 |
| GI          | none  | Score   | 211                  |
| Exons       | 6..185, 17..169, 135..353, 182..379, 410..448, 411..458, 573..623, 591..749, 629..736, 762..926, 765..893, 941..1024, 942..1022, 1023..1109, 1143..1460, 1151..1372, 1499..1567 |         |                      |
|             |   |         |                      |
| Seq. No.    | 22237   | Seq. ID | OJ990505_02.9924.C20 |
| Gene No.    | 46349   | Strand  | -                    |
| Start       | 1369  | End     | 1568                 |
| Name        | OJ990505_02.9924.C20.o3.tm  | Method  | TBLASTX:Maize        |
| Start       | 18  | End     | 285                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| GI          | none  | Score   | 337                  |
| Exons       | 18..275, 18..77, 23..265, 242..283, 243..284, 244..285  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22237   | Seq. ID | OJ990505_02.9924.C20 |
| Gene No.    | 46349   | Strand  | -                    |
| Start       | 1369  | End     | 1568                 |
| Name        | OJ990505_02.9924.C20.o2.tm  | Method  | TBLASTX:Maize        |
| Start       | 525   | End     | 826                  |
| GI          | none  | Score   | 401                  |
| Exons       | 525..824, 525..815, 527..826, 716..826  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22237   | Seq. ID | OJ990505_02.9924.C20 |
| Gene No.    | 46349   | Strand  | -                    |
| Start       | 1369  | End     | 1568                 |
| Name        | OJ990505_02.9924.C20.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 827   | End     | 1364                 |
| GI          | none  | Score   | 140                  |
| Exons       | 827..928, 828..935, 927..1025, 928..1026, 930..1016, 931..1026, 935..1033, 1025..1363, 1026..1364 |         |                      |
|             |   |         |                      |
| Seq. No.    | 22237   | Seq. ID | OJ990505_02.9924.C20 |
| Gene No.    | 46349   | Strand  | -                    |
| Start       | 1369  | End     | 1568                 |
| Name        | OJ990505_02.9924.C20.o4.tm  | Method  | TBLASTX:Maize        |
| Start       | 1366  | End     | 1568                 |
| GI          | none  | Score   | 135                  |
| Exons       | 1366..1563, 1380..1568, 1380..1559, 1382..1567  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22237   | Seq. ID | OJ990505_02.9924.C20 |
| Gene No.    | 46349   | Strand  | -                    |
| Start       | 1369  | End     | 1568                 |
| Name        | OJ990505_02.9924.C20.o1.gp  | Method  | AAT/GAP              |
| Start       | 1369  | End     | 1566                 |
| GI          | 426100  | Score   | 361                  |
| Exons       | 1369..1566  |         |                      |
| GI Descrip. | 2589162/dbj BAA23226  2.0e-47 (D88451) aldehyde oxidase [Zea mays]                                |         |                      |
|             |   |         |                      |
| Seq. No.    | 22238   | Seq. ID | OJ990505_02.9924.C21 |
| Gene No.    | 46350   | Strand  | +                    |
| Start       | 57  | End     | 195                  |
| Name        | OJ990505_02.9924.C21.o1.gs  | Method  | GENSCAN              |
| Start       | 57  | End     | 195                  |
| GI          | none  | Score   | .87                  |
| Exons       | 57..195   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22239   | Seq. ID | OJ990505_02.9924.C24 |
| Gene No.    | 46351   | Strand  | +                    |
| Start       | 1   | End     | 609                  |
| Name        | OJ990505_02.9924.C24.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 609                  |
| GI          | 6006864   | Score   | 447                  |
| Exons       | 1..609  |         |                      |
| GI Descrip. | (AC009540) hypothetical protein [Arabidopsis thaliana]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22239   | Seq. ID | OJ990505_02.9924.C24 |
| Gene No.    | 46351   | Strand  | +                    |

|       |   |        |               |
|-------|---|--------|---------------|
| Start | 1   | End    | 609           |
| Name  | OJ990505_02.9924.C24.o2.tm                                | Method | TBLASTX:Maize |
| Start | 1   | End    | 200           |
| GI    | none  | Score  | 89            |
| Exons | 1..87, 1..84, 3..101, 44..199, 87..200, 87..200, 108..179 |        |               |

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 22239                                | Seq. ID | OJ990505_02.9924.C24 |
| Gene No. | 46351                                | Strand  | +                    |
| Start    | 1                                    | End     | 609                  |
| Name     | OJ990505_02.9924.C24.o1.tc           | Method  | TBLASTX:Cress        |
| Start    | 86                                   | End     | 383                  |
| GI       | none                                 | Score   | 144                  |
| Exons    | 86..229, 87..257, 246..383, 299..382 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22239                      | Seq. ID | OJ990505_02.9924.C24 |
| Gene No. | 46351                      | Strand  | +                    |
| Start    | 1                          | End     | 609                  |
| Name     | OJ990505_02.9924.C24.o1.gs | Method  | GENSCAN              |
| Start    | 114                        | End     | 608                  |
| GI       | none                       | Score   | .96                  |
| Exons    | 114..608                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22239  | Seq. ID | OJ990505_02.9924.C24 |
| Gene No. | 46351  | Strand  | +                    |
| Start    | 1  | End     | 609                  |
| Name     | OJ990505_02.9924.C24.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 201  | End     | 590                  |
| GI       | none   | Score   | 50                   |
| Exons    | 201..248, 210..383, 219..338, 264..467, 269..475, 270..470, 492..590, 527..589 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22239                      | Seq. ID | OJ990505_02.9924.C24 |
| Gene No. | 46351                      | Strand  | +                    |
| Start    | 1                          | End     | 609                  |
| Name     | OJ990505_02.9924.C24.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 207                        | End     | 505                  |
| GI       | none                       | Score   | 289                  |
| Exons    | 207..497, 212..505         |         |                      |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22240                            | Seq. ID | OJ990505_02.9924.C26 |
| Gene No. | 46352                            | Strand  | +                    |
| Start    | 867                              | End     | 2513                 |
| Name     | OJ990505_02.9924.C26.o1.gs       | Method  | GENSCAN              |
| Start    | 867                              | End     | 2513                 |
| GI       | none                             | Score   | .85                  |
| Exons    | 867..968, 1401..1471, 2351..2513 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22241  | Seq. ID | OJ990505_02.9924.C27 |
| Gene No.    | 46353  | Strand  | +                    |
| Start       | 1037   | End     | 1169                 |
| Name        | OJ990505_02.9924.C27.o1.np                     | Method  | AAT/NAP              |
| Start       | 1037   | End     | 1169                 |
| GI          | 6815099  | Score   | 74                   |
| Exons       | 1037..1169                                     |         |                      |
| GI Descrip. | (AP001081) hypothetical protein [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22241 | Seq. ID | OJ990505_02.9924.C27 |
|----------|-------|---------|----------------------|

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 46354  | Strand | +       |
| Start       | 2667   | End    | 2985    |
| Name        | OJ990505_02.9924.C27.o2.np                   | Method | AAT/NAP |
| Start       | 2667   | End    | 2985    |
| GI          | 5777617                                      | Score  | 78      |
| Exons       | 2667..2985                                   |        |         |
| GI Descrip. | (AJ245900) CAA30375.1 protein [Oryza sativa] |        |         |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22241  | Seq. ID | OJ990505_02.9924.C27 |
| Gene No.    | 46355  | Strand  | +                    |
| Start       | 12502  | End     | 13987                |
| Name        | OJ990505_02.9924.C27.o4.np   | Method  | AAT/NAP              |
| Start       | 12502  | End     | 13987                |
| GI          | 2398679  | Score   | 141                  |
| Exons       | 12502..12677, 13958..13987   |         |                      |
| GI Descrip. | (Y14797) 3-deoxy-D-arabino-heptulosonate 7-phosphate synthase [Morinda citrifolia] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22241   | Seq. ID | OJ990505_02.9924.C27 |
| Gene No. | 46356   | Strand  | -                    |
| Start    | 2501  | End     | 12780                |
| Name     | OJ990505_02.9924.C27.o1.gs  | Method  | GENSCAN              |
| Start    | 2501  | End     | 12730                |
| GI       | none  | Score   | .55                  |
| Exons    | 2501..2580, 2624..2782, 3267..3616, 3636..3905, 4024..4089, 6359..6396, 8001..8363, 9006..9825, 9851..10421, 11685..12120, 12671..12730 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22241  | Seq. ID | OJ990505_02.9924.C27 |
| Gene No.    | 46356  | Strand  | -                    |
| Start       | 2501   | End     | 12780                |
| Name        | OJ990505_02.9924.C27.o3.np                   | Method  | AAT/NAP              |
| Start       | 4417   | End     | 4510                 |
| GI          | 5777617                                      | Score   | 71                   |
| Exons       | 4417..4510                                   |         |                      |
| GI Descrip. | (AJ245900) CAA30375.1 protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22241                      | Seq. ID | OJ990505_02.9924.C27 |
| Gene No. | 46356                      | Strand  | -                    |
| Start    | 2501                       | End     | 12780                |
| Name     | OJ990505_02.9924.C27.o1.gp | Method  | AAT/GAP              |
| Start    | 7075                       | End     | 7462                 |
| GI       | 2427926                    | Score   | 721                  |
| Exons    | 7075..7462                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22241                      | Seq. ID | OJ990505_02.9924.C27 |
| Gene No. | 46356                      | Strand  | -                    |
| Start    | 2501                       | End     | 12780                |
| Name     | OJ990505_02.9924.C27.o2.gp | Method  | AAT/GAP              |
| Start    | 9847                       | End     | 10018                |
| GI       | 2796869                    | Score   | 281                  |
| Exons    | 9847..10018                |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22241                      | Seq. ID | OJ990505_02.9924.C27 |
| Gene No. | 46356                      | Strand  | -                    |
| Start    | 2501                       | End     | 12780                |
| Name     | OJ990505_02.9924.C27.o1.ts | Method  | TBLASTX:Soybean      |



|       |  |       |       |
|-------|--|-------|-------|
| Start | 12349  | End   | 12777 |
| GI    | none   | Score | 42    |
| Exons | 12349..12378, 12357..12377, 12497..12589, 12497..12589,<br>12501..12620, 12584..12640, 12592..12633, 12643..12777,<br>12644..12775 |       |       |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22241  | Seq. ID | OJ990505_02.9924.C27 |
| Gene No. | 46356  | Strand  | -                    |
| Start    | 2501   | End     | 12780                |
| Name     | OJ990505_02.9924.C27.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 12497  | End     | 12780                |
| GI       | none   | Score   | 121                  |
| Exons    | 12497..12589, 12497..12589, 12501..12623, 12501..12623,<br>12584..12640, 12585..12644, 12592..12639, 12640..12780,<br>12641..12775 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22241                                    | Seq. ID | OJ990505_02.9924.C27 |
| Gene No. | 46356                                    | Strand  | -                    |
| Start    | 2501                                     | End     | 12780                |
| Name     | OJ990505_02.9924.C27.o1.tc               | Method  | TBLASTX:Cress        |
| Start    | 12572                                    | End     | 12777                |
| GI       | none                                     | Score   | 96                   |
| Exons    | 12572..12640, 12643..12777, 12644..12775 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22242   | Seq. ID | OJ990505_02.9924.C30 |
| Gene No. | 46357   | Strand  | +                    |
| Start    | 412   | End     | 2886                 |
| Name     | OJ990505_02.9924.C30.o1.gs                              | Method  | GENSCAN              |
| Start    | 412   | End     | 2886                 |
| GI       | none  | Score   | .53                  |
| Exons    | 412..628, 946..1074, 1076..2104, 2316..2436, 2682..2886 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22243                      | Seq. ID | OJ990505_02.9924.C31 |
| Gene No. | 46358                      | Strand  | +                    |
| Start    | 2953                       | End     | 3981                 |
| Name     | OJ990505_02.9924.C31.o2.gs | Method  | GENSCAN              |
| Start    | 2953                       | End     | 3981                 |
| GI       | none                       | Score   | .63                  |
| Exons    | 2953..3981                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22243                                      | Seq. ID | OJ990505_02.9924.C31 |
| Gene No.    | 46358                                      | Strand  | +                    |
| Start       | 2953                                       | End     | 3981                 |
| Name        | OJ990505_02.9924.C31.o1.np                 | Method  | AAT/NAP              |
| Start       | 2962                                       | End     | 3959                 |
| GI          | 6092014                                    | Score   | 403                  |
| Exons       | 2962..3959                                 |         |                      |
| GI Descrip. | (AB026296) hsr203J homolog [Pisum sativum] |         |                      |

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 22243                             | Seq. ID | OJ990505_02.9924.C31 |
| Gene No. | 46359                             | Strand  | -                    |
| Start    | 722                               | End     | 3909                 |
| Name     | OJ990505_02.9924.C31.o1.gs        | Method  | GENSCAN              |
| Start    | 722                               | End     | 1403                 |
| GI       | none                              | Score   | .53                  |
| Exons    | 722..1132, 1156..1248, 1320..1403 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22243  | Seq. ID | OJ990505_02.9924.C31 |
| Gene No. | 46359  | Strand  | -                    |
| Start    | 722  | End     | 3909                 |
| Name     | OJ990505_02.9924.C31.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 953  | End     | 3471                 |
| GI       | none   | Score   | 45                   |
| Exons    | 953..994, 959..988, 987..1097, 1016..1096, 1114..1176,<br>1135..1176, 3118..3405, 3129..3296, 3382..3471, 3391..3468 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22243   | Seq. ID | OJ990505_02.9924.C31 |
| Gene No. | 46359   | Strand  | -                    |
| Start    | 722   | End     | 3909                 |
| Name     | OJ990505_02.9924.C31.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 953   | End     | 3909                 |
| GI       | none  | Score   | 64                   |
| Exons    | 953..1189, 1189..1278, 1314..1373, 2977..3069, 3067..3171,<br>3166..3390, 3406..3606, 3432..3605, 3549..3707, 3550..3714,<br>3817..3909 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22243  | Seq. ID | OJ990505_02.9924.C31 |
| Gene No. | 46359  | Strand  | -                    |
| Start    | 722  | End     | 3909                 |
| Name     | OJ990505_02.9924.C31.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 1092   | End     | 3512                 |
| GI       | none   | Score   | 40                   |
| Exons    | 1092..1121, 1093..1122, 1124..1159, 1126..1167, 1126..1188,<br>1169..1273, 1183..1272, 1198..1275, 1281..1373, 1290..1373,<br>1306..1377, 2973..3296, 2977..3363, 3447..3512 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22243  | Seq. ID | OJ990505_02.9924.C31 |
| Gene No. | 46359  | Strand  | -                    |
| Start    | 722  | End     | 3909                 |
| Name     | OJ990505_02.9924.C31.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 3103   | End     | 3687                 |
| GI       | none   | Score   | 43                   |
| Exons    | 3103..3162, 3166..3384, 3439..3522, 3535..3687 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22243                              | Seq. ID | OJ990505_02.9924.C31 |
| Gene No. | 46359                              | Strand  | -                    |
| Start    | 722                                | End     | 3909                 |
| Name     | OJ990505_02.9924.C31.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 3474                               | End     | 3759                 |
| GI       | none                               | Score   | 229                  |
| Exons    | 3474..3707, 3475..3708, 3628..3759 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22244   | Seq. ID | OJ990505_02.9924.C32 |
| Gene No. | 46360   | Strand  | +                    |
| Start    | 108   | End     | 15159                |
| Name     | OJ990505_02.9924.C32.o1.gs  | Method  | GENSCAN              |
| Start    | 108   | End     | 15159                |
| GI       | none  | Score   | .46                  |
| Exons    | 108..114, 151..262, 4825..6235, 7135..7377, 7663..7815,<br>7961..8029, 8685..8739, 10023..10055, 10733..10816,<br>11080..11168, 11519..11632, 12099..12233, 12433..12552,<br>13806..14009, 14861..15053, 15077..15159 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22244 | Seq. ID | OJ990505_02.9924.C32 |
|----------|-------|---------|----------------------|

|             |   |        |         |
|-------------|---|--------|---------|
| Gene No.    | 46360   | Strand | +       |
| Start       | 108   | End    | 15159   |
| Name        | OJ990505_02.9924.C32.o1.np  | Method | AAT/NAP |
| Start       | 5750  | End    | 8307    |
| GI          | 4773917   | Score  | 346     |
| Exons       | 5750..6134, 6189..6235, 7147..7389, 8222..8307  |        |         |
| GI Descrip. | (AF147259) similar to human prostate-specific membrane antigen (PSM) (SP:Q04609) [Arabidopsis thaliana] |        |         |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22244  | Seq. ID | OJ990505_02.9924.C32 |
| Gene No.    | 46360  | Strand  | +                    |
| Start       | 108  | End     | 15159                |
| Name        | OJ990505_02.9924.C32.o1.gp   | Method  | AAT/GAP              |
| Start       | 10266  | End     | 12159                |
| GI          | 425889   | Score   | 771                  |
| Exons       | 10266..10354, 10733..10816, 11080..11168, 11519..11632, 12099..12159 |         |                      |
| GI Descrip. | 2653779 3.0e-10 (AF009921) I100 [Rattus norvegicus]                  |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22244  | Seq. ID | OJ990505_02.9924.C32 |
| Gene No.    | 46360  | Strand  | +                    |
| Start       | 108  | End     | 15159                |
| Name        | OJ990505_02.9924.C32.o2.gp   | Method  | AAT/GAP              |
| Start       | 12147  | End     | 12718                |
| GI          | 3760742  | Score   | 1119                 |
| Exons       | 12147..12718   |         |                      |
| GI Descrip. | 4521193/dbj AB013450.1 AB013450 3.0e-21 Oryza sativa DNA, similar sequence to Pib gene |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22244  | Seq. ID | OJ990505_02.9924.C32 |
| Gene No.    | 46360  | Strand  | +                    |
| Start       | 108  | End     | 15159                |
| Name        | OJ990505_02.9924.C32.o2.np                             | Method  | AAT/NAP              |
| Start       | 13848  | End     | 15024                |
| GI          | 3150407  | Score   | 262                  |
| Exons       | 13848..14009, 14861..15024                             |         |                      |
| GI Descrip. | (AC004165) hypothetical protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22244  | Seq. ID | OJ990505_02.9924.C32 |
| Gene No. | 46361  | Strand  | -                    |
| Start    | 15654  | End     | 16229                |
| Name     | OJ990505_02.9924.C32.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 5980   | End     | 11168                |
| GI       | none   | Score   | 120                  |
| Exons    | 5980..6162, 5981..6163, 7147..7386, 7152..7370, 7654..7758, 7662..7763, 7756..7818, 10240..10350, 10726..10815, 11079..11168 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22244  | Seq. ID | OJ990505_02.9924.C32 |
| Gene No. | 46361  | Strand  | -                    |
| Start    | 15654  | End     | 16229                |
| Name     | OJ990505_02.9924.C32.o2.tc                     | Method  | TBLASTX:Cress        |
| Start    | 7128   | End     | 7390                 |
| GI       | none   | Score   | 295                  |
| Exons    | 7128..7385, 7129..7386, 7129..7386, 7181..7390 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22244 | Seq. ID | OJ990505_02.9924.C32 |
| Gene No. | 46361 | Strand  | -                    |

|       |  |        |                 |
|-------|--|--------|-----------------|
| Start | 15654  | End    | 16229           |
| Name  | OJ990505_02.9924.C32.o1.ts                     | Method | TBLASTX:Soybean |
| Start | 7189   | End    | 7722            |
| GI    | none   | Score  | 302             |
| Exons | 7189..7386, 7191..7376, 7654..7722, 7662..7721 |        |                 |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22244                              | Seq. ID | OJ990505_02.9924.C32 |
| Gene No. | 46361                              | Strand  | -                    |
| Start    | 15654                              | End     | 16229                |
| Name     | OJ990505_02.9924.C32.o1.tw         | Method  | TBLASTX:Wheat        |
| Start    | 7194                               | End     | 7731                 |
| GI       | none                               | Score   | 227                  |
| Exons    | 7194..7373, 7195..7386, 7663..7731 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22244  | Seq. ID | OJ990505_02.9924.C32 |
| Gene No. | 46361  | Strand  | -                    |
| Start    | 15654  | End     | 16229                |
| Name     | OJ990505_02.9924.C32.o3.tc                             | Method  | TBLASTX:Cress        |
| Start    | 13851  | End     | 15004                |
| GI       | none   | Score   | 193                  |
| Exons    | 13851..14024, 13874..14005, 13878..14009, 14855..15004 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22244                                  | Seq. ID | OJ990505_02.9924.C32 |
| Gene No.    | 46361                                  | Strand  | -                    |
| Start       | 15654                                  | End     | 16229                |
| Name        | OJ990505_02.9924.C32.o3.np             | Method  | AAT/NAP              |
| Start       | 15638                                  | End     | 16229                |
| GI          | 2589164                                | Score   | 523                  |
| Exons       | 15638..15862, 15947..16229             |         |                      |
| GI Descrip. | (D88452) aldehyde oxidase-2 [Zea mays] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22244                      | Seq. ID | OJ990505_02.9924.C32 |
| Gene No. | 46361                      | Strand  | -                    |
| Start    | 15654                      | End     | 16229                |
| Name     | OJ990505_02.9924.C32.o2.gs | Method  | GENSCAN              |
| Start    | 15654                      | End     | 16136                |
| GI       | none                       | Score   | 1                    |
| Exons    | 15654..15862, 15947..16136 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22244  | Seq. ID | OJ990505_02.9924.C32 |
| Gene No. | 46361  | Strand  | -                    |
| Start    | 15654  | End     | 16229                |
| Name     | OJ990505_02.9924.C32.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 15666  | End     | 16156                |
| GI       | none   | Score   | 49                   |
| Exons    | 15666..15776, 15721..15777, 15765..15863, 15780..15827, 15916..16152, 15948..16139, 15949..16152, 16004..16156 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22244  | Seq. ID | OJ990505_02.9924.C32 |
| Gene No. | 46361  | Strand  | -                    |
| Start    | 15654  | End     | 16229                |
| Name     | OJ990505_02.9924.C32.o1.tc                             | Method  | TBLASTX:Cress        |
| Start    | 15675  | End     | 16139                |
| GI       | none   | Score   | 156                  |
| Exons    | 15675..15770, 15783..15863, 15948..16139, 15949..16134 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22244 | Seq. ID | OJ990505_02.9924.C32 |
|----------|-------|---------|----------------------|

|          |  |        |                 |
|----------|--|--------|-----------------|
| Gene No. | 46361                                    | Strand | -               |
| Start    | 15654                                    | End    | 16229           |
| Name     | OJ990505_02.9924.C32.o2.ts               | Method | TBLASTX:Soybean |
| Start    | 15675                                    | End    | 16016           |
| GI       | none                                     | Score  | 81              |
| Exons    | 15675..15755, 15783..15863, 15948..16016 |        |                 |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22245                      | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46362                      | Strand  | +                    |
| Start    | 11943                      | End     | 12406                |
| Name     | OJ990505_02.9924.C33.o3.gs | Method  | GENSCAN              |
| Start    | 11943                      | End     | 12406                |
| GI       | none                       | Score   | .96                  |
| Exons    | 11943..12004, 12340..12406 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22245                      | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46363                      | Strand  | +                    |
| Start    | 13178                      | End     | 13363                |
| Name     | OJ990505_02.9924.C33.o4.gs | Method  | GENSCAN              |
| Start    | 13178                      | End     | 13363                |
| GI       | none                       | Score   | .54                  |
| Exons    | 13178..13363               |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22245  | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46364  | Strand  | -                    |
| Start    | 1051   | End     | 7751                 |
| Name     | OJ990505_02.9924.C33.o1.np   | Method  | AAT/NAP              |
| Start    | 1033   | End     | 7745                 |
| GI       | 2589164  | Score   | 5213                 |
| Exons    | 1033..1259, 1342..1531, 1663..1761, 1898..1993, 2307..3260, 3582..3800, 4181..4390, 4516..4778, 4940..5087, 5124..6616, 7601..7745 |         |                      |

GI Descrip. (D88452) aldehyde oxidase-2 [Zea mays]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22245  | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46364  | Strand  | -                    |
| Start    | 1051   | End     | 7751                 |
| Name     | OJ990505_02.9924.C33.o1.gs   | Method  | GENSCAN              |
| Start    | 1051   | End     | 7751                 |
| GI       | none   | Score   | .93                  |
| Exons    | 1051..1259, 1342..1531, 1663..1761, 1898..1993, 2307..3260, 3582..3800, 4181..4390, 4516..4778, 4940..6616, 7601..7751 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22245  | Seq. ID | OJ990505_02.9924.C33 |
| Gene No.    | 46364  | Strand  | -                    |
| Start       | 1051   | End     | 7751                 |
| Name        | OJ990505_02.9924.C33.o1.gp   | Method  | AAT/GAP              |
| Start       | 3558   | End     | 4650                 |
| GI          | 12055_1.R1084  | Score   | 1043                 |
| Exons       | 3558..3800, 4181..4390, 4516..4650                                   |         |                      |
| GI Descrip. | '2589162/dbj BAA23226  2.0e-47 (D88451) aldehyde oxidase [Zea mays]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22245                      | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46365                      | Strand  | -                    |
| Start    | 9234                       | End     | 9758                 |
| Name     | OJ990505_02.9924.C33.o2.gs | Method  | GENSCAN              |

Start 9234  
 GI none  
 Exons 9234..9352, 9641..9758

End 9758  
 Score .7

Seq. No. 22245 Seq. ID OJ990505\_02.9924.C33  
 Gene No. 46366 Strand -  
 Start 14132 End 14766  
 Name OJ990505\_02.9924.C33.o2.tm Method TBLASTX:Maize  
 Start 1063 End 2735  
 GI none Score 127  
 Exons 1063..1173, 1070..1174, 1162..1260, 1177..1224, 1343..1534,  
 1344..1547, 1353..1547, 1399..1551, 1660..1764, 1661..1729,  
 1663..1764, 1863..1997, 1895..2041, 1895..1996, 2301..2354,  
 2343..2726, 2344..2733, 2344..2565, 2346..2735

Seq. No. 22245 Seq. ID OJ990505\_02.9924.C33  
 Gene No. 46366 Strand -  
 Start 14132 End 14766  
 Name OJ990505\_02.9924.C33.o1.tc Method TBLASTX:Cress  
 Start 1072 End 7691  
 GI none Score 73  
 Exons 1072..1167, 1073..1168, 1180..1260, 1343..1534, 1344..1529,  
 1651..1764, 1667..1726, 1895..1996, 2331..3230, 2332..3228,  
 3544..3816, 3576..3803, 4178..4390, 4193..4237, 4194..4388,  
 4283..4390, 4597..4779, 4597..4782, 4598..4780, 4938..5030,  
 5157..5363, 5167..5361, 5415..5486, 5416..5472, 5499..5585,  
 5595..5828, 5611..5763, 5775..5894, 5788..5892, 6072..6152,  
 6073..6111, 6162..6323, 6163..6321, 6354..6584, 6355..6618,  
 7599..7691

Seq. No. 22245 Seq. ID OJ990505\_02.9924.C33  
 Gene No. 46366 Strand -  
 Start 14132 End 14766  
 Name OJ990505\_02.9924.C33.o3.ts Method TBLASTX:Soybean  
 Start 1072 End 1411  
 GI none Score 74  
 Exons 1072..1152, 1076..1153, 1180..1260, 1343..1411

Seq. No. 22245 Seq. ID OJ990505\_02.9924.C33  
 Gene No. 46366 Strand -  
 Start 14132 End 14766  
 Name OJ990505\_02.9924.C33.o2.ts Method TBLASTX:Soybean  
 Start 1496 End 2612  
 GI none Score 75  
 Exons 1496..1534, 1651..1764, 1651..1764, 1895..1996, 2341..2487,  
 2343..2564, 2343..2612

Seq. No. 22245 Seq. ID OJ990505\_02.9924.C33  
 Gene No. 46366 Strand -  
 Start 14132 End 14766  
 Name OJ990505\_02.9924.C33.o2.tw Method TBLASTX:Wheat  
 Start 1744 End 2609  
 GI none Score 40  
 Exons 1744..1764, 1890..1994, 1894..1995, 1895..1996, 1895..1996,  
 2307..2342, 2344..2505, 2347..2487, 2488..2571, 2508..2609,  
 2533..2562

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22245  | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46366  | Strand  | -                    |
| Start    | 14132  | End     | 14766                |
| Name     | OJ990505_02.9924.C33.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 2736   | End     | 5218                 |
| GI       | none   | Score   | 159                  |
| Exons    | 2736..2954, 2737..3234, 2737..2826, 2739..3233, 3012..3266, 3161..3265, 3552..3803, 3576..3815, 4178..4396, 4179..4391, 4193..4396, 4195..4410, 4513..4782, 4517..4780, 4938..5144, 4939..5142, 4943..5143, 4943..5158, 5151..5216, 5151..5216, 5152..5217, 5156..5218 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22245                      | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46366                      | Strand  | -                    |
| Start    | 14132                      | End     | 14766                |
| Name     | OJ990505_02.9924.C33.o4.ts | Method  | TBLASTX:Soybean      |
| Start    | 2904                       | End     | 3090                 |
| GI       | none                       | Score   | 125                  |
| Exons    | 2904..3089, 2908..3090     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22245  | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46366  | Strand  | -                    |
| Start    | 14132  | End     | 14766                |
| Name     | OJ990505_02.9924.C33.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3600   | End     | 4390                 |
| GI       | none   | Score   | 106                  |
| Exons    | 3600..3815, 3600..3815, 3622..3816, 4178..4390, 4182..4388, 4195..4389 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22245  | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46366  | Strand  | -                    |
| Start    | 14132  | End     | 14766                |
| Name     | OJ990505_02.9924.C33.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 3762   | End     | 4575                 |
| GI       | none   | Score   | 58                   |
| Exons    | 3762..3803, 3764..3814, 3764..3814, 4178..4396, 4179..4391, 4193..4396, 4194..4400, 4513..4575, 4516..4575 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22245  | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46366  | Strand  | -                    |
| Start    | 14132  | End     | 14766                |
| Name     | OJ990505_02.9924.C33.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 5220   | End     | 5697                 |
| GI       | none   | Score   | 207                  |
| Exons    | 5220..5498, 5220..5498, 5221..5499, 5491..5589, 5499..5597, 5508..5594, 5589..5696, 5596..5697 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22245  | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46366  | Strand  | -                    |
| Start    | 14132  | End     | 14766                |
| Name     | OJ990505_02.9924.C33.o4.tm                     | Method  | TBLASTX:Maize        |
| Start    | 5698   | End     | 5999                 |
| GI       | none   | Score   | 302                  |
| Exons    | 5698..5997, 5698..5808, 5700..5999, 5709..5999 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22245 | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46366 | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 14132  | End    | 14766         |
| Name  | OJ990505_02.9924.C33.o5.tm                     | Method | TBLASTX:Maize |
| Start | 6240   | End    | 6506          |
| GI    | none   | Score  | 65            |
| Exons | 6240..6281, 6241..6282, 6249..6506, 6259..6501 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22245                      | Seq. ID | OJ990505_02.9924.C33 |
| Gene No. | 46366                      | Strand  | -                    |
| Start    | 14132                      | End     | 14766                |
| Name     | OJ990505_02.9924.C33.o5.gs | Method  | GENSCAN              |
| Start    | 14132                      | End     | 14766                |
| GI       | none                       | Score   | .55                  |
| Exons    | 14132..14592, 14658..14766 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22246                      | Seq. ID | OJ990505_02.9924.C34 |
| Gene No. | 46367                      | Strand  | +                    |
| Start    | 208                        | End     | 311                  |
| Name     | OJ990505_02.9924.C34.o1.gs | Method  | GENSCAN              |
| Start    | 208                        | End     | 311                  |
| GI       | none                       | Score   | .84                  |
| Exons    | 208..311                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22247                      | Seq. ID | OJ990505_02.9924.C35 |
| Gene No. | 46368                      | Strand  | +                    |
| Start    | 1153                       | End     | 1330                 |
| Name     | OJ990505_02.9924.C35.o1.gs | Method  | GENSCAN              |
| Start    | 1153                       | End     | 1330                 |
| GI       | none                       | Score   | .86                  |
| Exons    | 1153..1330                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22247                      | Seq. ID | OJ990505_02.9924.C35 |
| Gene No. | 46369                      | Strand  | -                    |
| Start    | 2312                       | End     | 3528                 |
| Name     | OJ990505_02.9924.C35.o2.gs | Method  | GENSCAN              |
| Start    | 2312                       | End     | 2876                 |
| GI       | none                       | Score   | .85                  |
| Exons    | 2312..2622, 2687..2876     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22247                                  | Seq. ID | OJ990505_02.9924.C35 |
| Gene No.    | 46369                                  | Strand  | -                    |
| Start       | 2312                                   | End     | 3528                 |
| Name        | OJ990505_02.9924.C35.o1.np             | Method  | AAT/NAP              |
| Start       | 2350                                   | End     | 3528                 |
| GI          | 2589164                                | Score   | 478                  |
| Exons       | 2350..2581, 2687..2891, 3466..3528     |         |                      |
| GI Descrip. | (D88452) aldehyde oxidase-2 [Zea mays] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22247  | Seq. ID | OJ990505_02.9924.C35 |
| Gene No. | 46369  | Strand  | -                    |
| Start    | 2312   | End     | 3528                 |
| Name     | OJ990505_02.9924.C35.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 2380   | End     | 2896                 |
| GI       | none   | Score   | 126                  |
| Exons    | 2380..2490, 2387..2500, 2517..2570, 2519..2572, 2688..2891, 2689..2892, 2774..2896, 2781..2894 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22247 | Seq. ID | OJ990505_02.9924.C35 |
|----------|-------|---------|----------------------|



|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46369  | Strand | -             |
| Start    | 2312   | End    | 3528          |
| Name     | OJ990505_02.9924.C35.o1.tc                                 | Method | TBLASTX:Cress |
| Start    | 2389   | End    | 2892          |
| GI       | none   | Score  | 88            |
| Exons    | 2389..2481, 2390..2482, 2513..2572, 2688..2891, 2689..2892 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22248                      | Seq. ID | OJ990505_02.9924.C36 |
| Gene No. | 46370                      | Strand  | +                    |
| Start    | 4449                       | End     | 4954                 |
| Name     | OJ990505_02.9924.C36.o2.gs | Method  | GENSCAN              |
| Start    | 4449                       | End     | 4954                 |
| GI       | none                       | Score   | .83                  |
| Exons    | 4449..4641, 4746..4954     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22248  | Seq. ID | OJ990505_02.9924.C36 |
| Gene No. | 46370  | Strand  | +                    |
| Start    | 4449   | End     | 4954                 |
| Name     | OJ990505_02.9924.C36.o1.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 4541   | End     | 4935                 |
| GI       | none   | Score   | 105                  |
| Exons    | 4541..4636, 4542..4649, 4763..4930, 4834..4935 |         |                      |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22249  | Seq. ID | OJ990525_02.9921.C1 |
| Gene No. | 46371  | Strand  |                     |
| Start    | 18   | End     | 471                 |
| Name     | OJ990525_02.9921.C1.o1.tc                      | Method  | TBLASTX:Cress       |
| Start    | 18   | End     | 471                 |
| GI       | none   | Score   | 264                 |
| Exons    | 18..245, 84..287, 152..247, 349..402, 403..471 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22249  | Seq. ID | OJ990525_02.9921.C1 |
| Gene No. | 46371  | Strand  |                     |
| Start    | 18   | End     | 471                 |
| Name     | OJ990525_02.9921.C1.o1.ts                              | Method  | TBLASTX:Soybean     |
| Start    | 18   | End     | 396                 |
| GI       | none   | Score   | 251                 |
| Exons    | 18..245, 23..109, 30..278, 82..246, 345..395, 346..396 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22249   | Seq. ID | OJ990525_02.9921.C1 |
| Gene No. | 46371   | Strand  |                     |
| Start    | 18  | End     | 471                 |
| Name     | OJ990525_02.9921.C1.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 33  | End     | 447                 |
| GI       | none  | Score   | 93                  |
| Exons    | 33..251, 35..232, 36..245, 145..285, 345..386, 345..401, 346..396, 403..447 |         |                     |

|          |                                      |         |                     |
|----------|--------------------------------------|---------|---------------------|
| Seq. No. | 22249                                | Seq. ID | OJ990525_02.9921.C1 |
| Gene No. | 46371                                | Strand  |                     |
| Start    | 18                                   | End     | 471                 |
| Name     | OJ990525_02.9921.C1.o1.tw            | Method  | TBLASTX:Wheat       |
| Start    | 78                                   | End     | 396                 |
| GI       | none                                 | Score   | 211                 |
| Exons    | 78..245, 78..245, 345..395, 346..396 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22250 | Seq. ID | OJ990525_02.9921.C8 |
|----------|-------|---------|---------------------|

|          |                           |        |         |
|----------|---------------------------|--------|---------|
| Gene No. | 46372                     | Strand | +       |
| Start    | 186                       | End    | 282     |
| Name     | OJ990525_02.9921.C8.o1.gp | Method | AAT/GAP |
| Start    | 186                       | End    | 282     |
| GI       | 2311773                   | Score  | 153     |
| Exons    | 186..282                  |        |         |

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 22251                             | Seq. ID | OJ990525_02.9921.C10 |
| Gene No. | 46373                             | Strand  |                      |
| Start    | 5                                 | End     | 395                  |
| Name     | OJ990525_02.9921.C10.o1.tc        | Method  | TBLASTX:Cress        |
| Start    | 5                                 | End     | 208                  |
| GI       | none                              | Score   | 124                  |
| Exons    | 5..127, 6..125, 95..208, 124..204 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22251                                       | Seq. ID | OJ990525_02.9921.C10 |
| Gene No. | 46373                                       | Strand  |                      |
| Start    | 5   | End     | 395                  |
| Name     | OJ990525_02.9921.C10.o1.tw                  | Method  | TBLASTX:Wheat        |
| Start    | 5   | End     | 207                  |
| GI       | none  | Score   | 108                  |
| Exons    | 5..127, 6..125, 11..142, 124..207, 125..187 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22251   | Seq. ID | OJ990525_02.9921.C10 |
| Gene No. | 46373   | Strand  |                      |
| Start    | 5   | End     | 395                  |
| Name     | OJ990525_02.9921.C10.o1.tm                            | Method  | TBLASTX:Maize        |
| Start    | 5   | End     | 395                  |
| GI       | none  | Score   | 110                  |
| Exons    | 5..127, 6..125, 11..127, 124..207, 125..190, 300..395 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22251   | Seq. ID | OJ990525_02.9921.C10 |
| Gene No. | 46373   | Strand  |                      |
| Start    | 5   | End     | 395                  |
| Name     | OJ990525_02.9921.C10.o1.ts                            | Method  | TBLASTX:Soybean      |
| Start    | 5   | End     | 395                  |
| GI       | none  | Score   | 101                  |
| Exons    | 5..127, 6..125, 11..127, 124..207, 125..190, 300..395 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22251  | Seq. ID | OJ990525_02.9921.C10 |
| Gene No. | 46374  | Strand  |                      |
| Start    | 1196   | End     | 1374                 |
| Name     | OJ990525_02.9921.C10.o2.tm                     | Method  | TBLASTX:Maize        |
| Start    | 1196   | End     | 1374                 |
| GI       | none   | Score   | 48                   |
| Exons    | 1196..1273, 1204..1245, 1252..1374, 1262..1372 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22252  | Seq. ID | OJ990525_02.9921.C23 |
| Gene No. | 46375  | Strand  |                      |
| Start    | 100  | End     | 1141                 |
| Name     | OJ990525_02.9921.C23.o1.ts                       | Method  | TBLASTX:Soybean      |
| Start    | 100  | End     | 587                  |
| GI       | none   | Score   | 91                   |
| Exons    | 100..186, 101..184, 453..518, 461..583, 462..587 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22252 | Seq. ID | OJ990525_02.9921.C23 |
| Gene No. | 46375 | Strand  |                      |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 100  | End    | 1141          |
| Name  | OJ990525_02.9921.C23.ol.tm   | Method | TBLASTX:Maize |
| Start | 100  | End    | 1141          |
| GI    | none   | Score  | 82            |
| Exons | 100..174, 100..186, 101..184, 461..589, 462..587, 463..591, 464..592, 465..596, 713..769, 714..779, 715..765, 1045..1128, 1046..1138, 1049..1141 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22253  | Seq. ID | OJ990525_02.9921.C24 |
| Gene No. | 46376  | Strand  |                      |
| Start    | 331  | End     | 2185                 |
| Name     | OJ990525_02.9921.C24.ol.tc   | Method  | TBLASTX:Cress        |
| Start    | 331  | End     | 2185                 |
| GI       | none   | Score   | 102                  |
| Exons    | 331..420, 336..404, 1227..1304, 1358..1426, 1359..1427, 1535..1666, 1543..1662, 1554..1676, 1558..1677, 1826..2032, 1826..1975, 1828..2004, 2105..2185, 2107..2166 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22253  | Seq. ID | OJ990525_02.9921.C24 |
| Gene No. | 46376  | Strand  |                      |
| Start    | 331  | End     | 2185                 |
| Name     | OJ990525_02.9921.C24.ol.tm   | Method  | TBLASTX:Maize        |
| Start    | 1547   | End     | 2170                 |
| GI       | none   | Score   | 201                  |
| Exons    | 1547..1669, 1549..1668, 1808..2002, 1818..2003, 1825..2010, 1826..2020, 2099..2170, 2107..2166 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22253  | Seq. ID | OJ990525_02.9921.C24 |
| Gene No. | 46376  | Strand  |                      |
| Start    | 331  | End     | 2185                 |
| Name     | OJ990525_02.9921.C24.ol.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1583   | End     | 2142                 |
| GI       | none   | Score   | 139                  |
| Exons    | 1583..1666, 1588..1677, 1826..2020, 1834..2010, 2102..2140, 2110..2142 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22253  | Seq. ID | OJ990525_02.9921.C24 |
| Gene No. | 46376  | Strand  |                      |
| Start    | 331  | End     | 2185                 |
| Name     | OJ990525_02.9921.C24.ol.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 1892   | End     | 2179                 |
| GI       | none   | Score   | 206                  |
| Exons    | 1892..2035, 1892..1993, 1894..2022, 2039..2170, 2084..2179 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22254  | Seq. ID | OJ990525_02.9921.C28 |
| Gene No. | 46377  | Strand  |                      |
| Start    | 798  | End     | 2253                 |
| Name     | OJ990525_02.9921.C28.ol.tw   | Method  | TBLASTX:Wheat        |
| Start    | 798  | End     | 2197                 |
| GI       | none   | Score   | 36                   |
| Exons    | 798..854, 828..950, 881..1003, 922..1011, 925..954, 1866..2066, 1891..2085, 1891..2097, 2165..2194, 2165..2197 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22254                      | Seq. ID | OJ990525_02.9921.C28 |
| Gene No. | 46377                      | Strand  |                      |
| Start    | 798                        | End     | 2253                 |
| Name     | OJ990525_02.9921.C28.ol.tc | Method  | TBLASTX:Cress        |

|       |   |       |      |
|-------|---|-------|------|
| Start | 925   | End   | 2230 |
| GI    | none  | Score | 69   |
| Exons | 925..1011, 1889..2017, 1891..2028, 1940..2074, 2165..2230 |       |      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22254   | Seq. ID | OJ990525_02.9921.C28 |
| Gene No. | 46377   | Strand  |                      |
| Start    | 798   | End     | 2253                 |
| Name     | OJ990525_02.9921.C28.ol.tm  | Method  | TBLASTX:Maize        |
| Start    | 967   | End     | 2253                 |
| GI       | none  | Score   | 203                  |
| Exons    | 967..1011, 1884..2054, 1891..2085, 1891..2097, 2165..2236, 2165..2239, 2173..2253 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22255                      | Seq. ID | OJ990525_02.9921.C29 |
| Gene No. | 46378                      | Strand  | -                    |
| Start    | 405                        | End     | 886                  |
| Name     | OJ990525_02.9921.C29.ol.gp | Method  | AAT/GAP              |
| Start    | 405                        | End     | 886                  |
| GI       | none                       | Score   | 646                  |
| Exons    | 405..633, 771..886         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22255  | Seq. ID | OJ990525_02.9921.C29 |
| Gene No. | 46378  | Strand  | -                    |
| Start    | 405  | End     | 886                  |
| Name     | OJ990525_02.9921.C29.ol.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 456  | End     | 849                  |
| GI       | none   | Score   | 188                  |
| Exons    | 456..635, 457..642, 458..634, 490..636, 763..849, 771..848 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22256                      | Seq. ID | OJ990525_02.9921.C37 |
| Gene No. | 46379                      | Strand  | +                    |
| Start    | 996                        | End     | 1200                 |
| Name     | OJ990525_02.9921.C37.ol.gp | Method  | AAT/GAP              |
| Start    | 996                        | End     | 1200                 |
| GI       | none                       | Score   | 410                  |
| Exons    | 996..1200                  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22257                                  | Seq. ID | OJ990525_02.9921.C38 |
| Gene No. | 46380                                  | Strand  |                      |
| Start    | 279                                    | End     | 724                  |
| Name     | OJ990525_02.9921.C38.ol.ts             | Method  | TBLASTX:Soybean      |
| Start    | 279                                    | End     | 724                  |
| GI       | none                                   | Score   | 95                   |
| Exons    | 279..485, 376..471, 590..724, 591..707 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22258   | Seq. ID | OJ990525_02.9921.C40 |
| Gene No.    | 46381   | Strand  | -                    |
| Start       | 117   | End     | 1420                 |
| Name        | OJ990525_02.9921.C40.ol.gp  | Method  | AAT/GAP              |
| Start       | 117   | End     | 1420                 |
| GI          | 38389 1.R1084   | Score   | 1113                 |
| Exons       | 117..551, 1082..1135, 1297..1420  |         |                      |
| GI Descrip. | '4138722/emb CAA70777 8.0e-30 (Y09590) hexose transporter [Vitis vinifera]' |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22259 | Seq. ID | OJ990525_02.9921.C48 |
| Gene No. | 46382 | Strand  |                      |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 220  | End    | 869           |
| Name  | OJ990525_02.9921.C48.ol.tc                       | Method | TBLASTX:Cress |
| Start | 220  | End    | 620           |
| GI    | none   | Score  | 86            |
| Exons | 220..300, 440..586, 440..580, 447..620, 447..608 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22259  | Seq. ID | OJ990525_02.9921.C48 |
| Gene No. | 46382  | Strand  |                      |
| Start    | 220  | End     | 869                  |
| Name     | OJ990525_02.9921.C48.ol.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 220  | End     | 583                  |
| GI       | none   | Score   | 151                  |
| Exons    | 220..351, 220..351, 449..577, 450..578, 451..579, 452..583 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22259  | Seq. ID | OJ990525_02.9921.C48 |
| Gene No. | 46382  | Strand  |                      |
| Start    | 220  | End     | 869                  |
| Name     | OJ990525_02.9921.C48.ol.tm                       | Method  | TBLASTX:Maize        |
| Start    | 449  | End     | 857                  |
| GI       | none   | Score   | 234                  |
| Exons    | 449..577, 450..578, 452..583, 788..853, 789..857 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22259  | Seq. ID | OJ990525_02.9921.C48 |
| Gene No. | 46382  | Strand  |                      |
| Start    | 220  | End     | 869                  |
| Name     | OJ990525_02.9921.C48.ol.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 458  | End     | 869                  |
| GI       | none   | Score   | 209                  |
| Exons    | 458..574, 459..578, 462..578, 464..583, 788..868, 789..869 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22260   | Seq. ID | OJ990525_02.9921.C49 |
| Gene No.    | 46383   | Strand  | -                    |
| Start       | 649   | End     | 1276                 |
| Name        | OJ990525_02.9921.C49.ol.gp  | Method  | AAT/GAP              |
| Start       | 649   | End     | 1276                 |
| GI          | 5771166   | Score   | 1161                 |
| Exons       | 649..1276   |         |                      |
| GI Descrip. | 5734438/emb CAB52688.1  1.0e-49 (AJ132223) hexose transporter [Lycopersicon esculentum] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22260  | Seq. ID | OJ990525_02.9921.C49 |
| Gene No. | 46384  | Strand  | -                    |
| Start    | 1928   | End     | 2392                 |
| Name     | OJ990525_02.9921.C49.ol.ts   | Method  | TBLASTX:Soybean      |
| Start    | 837  | End     | 2310                 |
| GI       | none   | Score   | 266                  |
| Exons    | 837..1208, 850..1209, 1212..2309, 1213..1281, 1251..1556, 1327..1716, 1786..1896, 1954..2310 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22260                      | Seq. ID | OJ990525_02.9921.C49 |
| Gene No. | 46384                      | Strand  | -                    |
| Start    | 1928                       | End     | 2392                 |
| Name     | OJ990525_02.9921.C49.ol.tm | Method  | TBLASTX:Maize        |
| Start    | 847                        | End     | 1544                 |
| GI       | none                       | Score   | 777                  |
| Exons    | 847..1542, 849..1544       |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22260  | Seq. ID | OJ990525_02.9921.C49 |
| Gene No. | 46384  | Strand  | -                    |
| Start    | 1928   | End     | 2392                 |
| Name     | OJ990525_02.9921.C49.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 849  | End     | 2334                 |
| GI       | none   | Score   | 298                  |
| Exons    | 849..1208, 850..1209, 1212..2312, 1213..1281, 1251..1544, 1327..1716, 1789..1899, 1951..2334 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22260                      | Seq. ID | OJ990525_02.9921.C49 |
| Gene No. | 46384                      | Strand  | -                    |
| Start    | 1928                       | End     | 2392                 |
| Name     | OJ990525_02.9921.C49.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 861                        | End     | 1187                 |
| GI       | none                       | Score   | 286                  |
| Exons    | 861..1187, 862..1179       |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22260                              | Seq. ID | OJ990525_02.9921.C49 |
| Gene No. | 46384                              | Strand  | -                    |
| Start    | 1928                               | End     | 2392                 |
| Name     | OJ990525_02.9921.C49.o2.tw         | Method  | TBLASTX:Wheat        |
| Start    | 1239                               | End     | 1577                 |
| GI       | none                               | Score   | 156                  |
| Exons    | 1239..1577, 1254..1526, 1330..1539 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22260                      | Seq. ID | OJ990525_02.9921.C49 |
| Gene No. | 46384                      | Strand  | -                    |
| Start    | 1928                       | End     | 2392                 |
| Name     | OJ990525_02.9921.C49.o3.tm | Method  | TBLASTX:Maize        |
| Start    | 1647                       | End     | 1898                 |
| GI       | none                       | Score   | 90                   |
| Exons    | 1647..1898, 1774..1887     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22260  | Seq. ID | OJ990525_02.9921.C49 |
| Gene No.    | 46384  | Strand  | -                    |
| Start       | 1928   | End     | 2392                 |
| Name        | OJ990525_02.9921.C49.o2.gp   | Method  | AAT/GAP              |
| Start       | 1928   | End     | 2392                 |
| GI          | 2427703  | Score   | 807                  |
| Exons       | 1928..2392   |         |                      |
| GI Descrip. | 4138722/emb CAA70777  8.0e-30 (Y09590) hexose transporter [Vitis vinifera] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22260                      | Seq. ID | OJ990525_02.9921.C49 |
| Gene No. | 46384                      | Strand  | -                    |
| Start    | 1928                       | End     | 2392                 |
| Name     | OJ990525_02.9921.C49.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 1989                       | End     | 2337                 |
| GI       | none                       | Score   | 494                  |
| Exons    | 1989..2324, 1990..2337     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22261                      | Seq. ID | OJ990525_02.9921.C50 |
| Gene No. | 46385                      | Strand  | -                    |
| Start    | 1996                       | End     | 2640                 |
| Name     | OJ990525_02.9921.C50.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 673                        | End     | 2175                 |
| GI       | none                       | Score   | 103                  |

Exons 673..873, 704..889, 705..887, 930..1088, 954..1079, 1188..1340, 1189..1341, 1195..1389, 1636..1803, 1645..1806, 2007..2150, 2009..2173, 2023..2175, 2137..2175

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22261   | Seq. ID | OJ990525_02.9921.C50 |
| Gene No. | 46385   | Strand  | -                    |
| Start    | 1996  | End     | 2640                 |
| Name     | OJ990525_02.9921.C50.o2.ts  | Method  | TBLASTX:Soybean      |
| Start    | 813   | End     | 1337                 |
| GI       | none  | Score   | 80                   |
| Exons    | 813..887, 815..889, 999..1079, 1014..1082, 1188..1247, 1192..1248, 1201..1263, 1248..1337 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22261   | Seq. ID | OJ990525_02.9921.C50 |
| Gene No.    | 46385   | Strand  | -                    |
| Start       | 1996  | End     | 2640                 |
| Name        | OJ990525_02.9921.C50.o1.gp  | Method  | AAT/GAP              |
| Start       | 1996  | End     | 2640                 |
| GI          | LIB3434-005-P1-K1-D3  | Score   | 756                  |
| Exons       | 1996..2236, 2399..2640  |         |                      |
| GI Descrip. | '5734438/emb CAB52688.1  1.0e-49 (AJ132223) hexose transporter [Lycopersicon esculentum]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22261  | Seq. ID | OJ990525_02.9921.C50 |
| Gene No. | 46385  | Strand  | -                    |
| Start    | 1996   | End     | 2640                 |
| Name     | OJ990525_02.9921.C50.o1.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 2042   | End     | 2592                 |
| GI       | none   | Score   | 128                  |
| Exons    | 2042..2179, 2043..2150, 2393..2590, 2406..2555, 2407..2592 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22261                      | Seq. ID | OJ990525_02.9921.C50 |
| Gene No. | 46385                      | Strand  | -                    |
| Start    | 1996                       | End     | 2640                 |
| Name     | OJ990525_02.9921.C50.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 2371                       | End     | 2593                 |
| GI       | none                       | Score   | 195                  |
| Exons    | 2371..2592, 2390..2593     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22262  | Seq. ID | OJ990525_02.9921.C51 |
| Gene No. | 46386  | Strand  | -                    |
| Start    | 361  | End     | 1967                 |
| Name     | OJ990525_02.9921.C51.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 361  | End     | 1967                 |
| GI       | none   | Score   | 222                  |
| Exons    | 361..516, 365..502, 369..503, 370..540, 669..734, 669..734, 670..735, 671..736, 1324..1401, 1329..1409, 1331..1408, 1862..1960, 1862..1960, 1866..1967 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22263   | Seq. ID | OJ990525_02.9921.C52 |
| Gene No. | 46387   | Strand  | -                    |
| Start    | 22  | End     | 323                  |
| Name     | OJ990525_02.9921.C52.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 22  | End     | 323                  |
| GI       | none  | Score   | 126                  |
| Exons    | 22..123, 23..121, 24..128, 220..321, 224..322, 224..322, 273..323 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22264  | Seq. ID | OJ990525_02.9921.C53 |
| Gene No.    | 46388  | Strand  |                      |
| Start       | 2  | End     | 298                  |
| Name        | OJ990525_02.9921.C53.ol.tm   | Method  | TBLASTX:Maize        |
| Start       | 2  | End     | 298                  |
| GI          | none   | Score   | 112                  |
| Exons       | 2..97, 3..101, 192..296, 197..298, 199..297  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22265  | Seq. ID | OJ990525_02.9921.C54 |
| Gene No.    | 46389  | Strand  | -                    |
| Start       | 1  | End     | 873                  |
| Name        | OJ990525_02.9921.C54.ol.gp   | Method  | AAT/GAP              |
| Start       | 1  | End     | 873                  |
| GI          | 17582_1.R1084  | Score   | 190                  |
| Exons       | 1..23, 361..436, 800..873  |         |                      |
| GI Descrip. | '4582434/gb AAD24820.1 AC007196_6 1.0e-41 (AC007196) unknown protein [Arabidopsis thaliana]' |         |                      |
|             |  |         |                      |
| Seq. No.    | 22266  | Seq. ID | OJ990525_02.9921.C56 |
| Gene No.    | 46390  | Strand  |                      |
| Start       | 418  | End     | 585                  |
| Name        | OJ990525_02.9921.C56.ol.ts   | Method  | TBLASTX:Soybean      |
| Start       | 418  | End     | 585                  |
| GI          | none   | Score   | 85                   |
| Exons       | 418..582, 422..553, 427..585, 428..583   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22267  | Seq. ID | OJ990525_02.9921.C62 |
| Gene No.    | 46391  | Strand  | +                    |
| Start       | 653  | End     | 706                  |
| Name        | OJ990525_02.9921.C62.ol.gp   | Method  | AAT/GAP              |
| Start       | 653  | End     | 706                  |
| GI          | uC-osflcyp029d06b1   | Score   | 100                  |
| Exons       | 653..706   |         |                      |
| GI Descrip. | '5524769/emb CAB50793.1  3.0e-11 (AJ243822) Mre11 protein [Arabidopsis thaliana]'            |         |                      |
|             |  |         |                      |
| Seq. No.    | 22268  | Seq. ID | OJ990525_02.9921.C63 |
| Gene No.    | 46392  | Strand  | +                    |
| Start       | 3191   | End     | 3526                 |
| Name        | OJ990525_02.9921.C63.ol.gp   | Method  | AAT/GAP              |
| Start       | 3191   | End     | 3526                 |
| GI          | uC-osflcyp029d06b1   | Score   | 586                  |
| Exons       | 3191..3526   |         |                      |
| GI Descrip. | '5524769/emb CAB50793.1  3.0e-11 (AJ243822) Mre11 protein [Arabidopsis thaliana]'            |         |                      |
|             |  |         |                      |
| Seq. No.    | 22269  | Seq. ID | OJ990525_02.9921.C64 |
| Gene No.    | 46393  | Strand  |                      |
| Start       | 85   | End     | 673                  |
| Name        | OJ990525_02.9921.C64.ol.tc   | Method  | TBLASTX:Cress        |
| Start       | 85   | End     | 673                  |
| GI          | none   | Score   | 125                  |
| Exons       | 85..123, 202..309, 204..308, 397..432, 433..483, 602..673                                    |         |                      |
|             |  |         |                      |
| Seq. No.    | 22269  | Seq. ID | OJ990525_02.9921.C64 |
| Gene No.    | 46394  | Strand  |                      |



|       |  |        |                 |
|-------|--|--------|-----------------|
| Start | 1280   | End    | 2101            |
| Name  | OJ990525_02.9921.C64.ol.ts   | Method | TBLASTX:Soybean |
| Start | 1280   | End    | 2101            |
| GI    | none   | Score  | 85              |
| Exons | 1280..1444, 1284..1415, 1289..1447, 1290..1445, 1960..2100, 1961..2101 |        |                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22270  | Seq. ID | OJ990525_02.9921.C65 |
| Gene No.    | 46395  | Strand  | +                    |
| Start       | 1636   | End     | 2176                 |
| Name        | OJ990525_02.9921.C65.ol.gp   | Method  | AAT/GAP              |
| Start       | 1636   | End     | 2176                 |
| GI          | 17582_1.R1084  | Score   | 299                  |
| Exons       | 1636..1698, 1801..1839, 1962..2043, 2151..2176   |         |                      |
| GI Descrip. | '4582434/gb AAD24820.1 AC007196_6 1.0e-41 (AC007196) unknown protein [Arabidopsis thaliana]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22271  | Seq. ID | OJ990525_02.9921.C69 |
| Gene No.    | 46396  | Strand  | -                    |
| Start       | 430  | End     | 741                  |
| Name        | OJ990525_02.9921.C69.ol.gp   | Method  | AAT/GAP              |
| Start       | 430  | End     | 741                  |
| GI          | 17582_1.R1084  | Score   | 573                  |
| Exons       | 430..741   |         |                      |
| GI Descrip. | '4582434/gb AAD24820.1 AC007196_6 1.0e-41 (AC007196) unknown protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22272  | Seq. ID | OJ990525_02.9921.C70 |
| Gene No. | 46397  | Strand  |                      |
| Start    | 760  | End     | 2399                 |
| Name     | OJ990525_02.9921.C70.ol.ts   | Method  | TBLASTX:Soybean      |
| Start    | 760  | End     | 1970                 |
| GI       | none   | Score   | 88                   |
| Exons    | 760..840, 1123..1233, 1665..1796, 1665..1799, 1669..1797, 1669..1815, 1676..1807, 1906..1968, 1908..1970 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22272  | Seq. ID | OJ990525_02.9921.C70 |
| Gene No. | 46397  | Strand  |                      |
| Start    | 760  | End     | 2399                 |
| Name     | OJ990525_02.9921.C70.ol.tm   | Method  | TBLASTX:Maize        |
| Start    | 1083   | End     | 2399                 |
| GI       | none   | Score   | 58                   |
| Exons    | 1083..1172, 1123..1176, 1159..1233, 1182..1232, 1669..1815, 1670..1819, 1670..1816, 1911..2006, 1915..2004, 1921..2010, 1922..2038, 2159..2227, 2169..2234, 2346..2399 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22273                        | Seq. ID | OJ990525_02.9921.C71 |
| Gene No. | 46398                        | Strand  |                      |
| Start    | 204                          | End     | 383                  |
| Name     | OJ990525_02.9921.C71.ol.ts   | Method  | TBLASTX:Soybean      |
| Start    | 204                          | End     | 372                  |
| GI       | none                         | Score   | 64                   |
| Exons    | 204..371, 211..372, 213..371 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22273 | Seq. ID | OJ990525_02.9921.C71 |
| Gene No. | 46398 | Strand  |                      |
| Start    | 204   | End     | 383                  |

|       |                              |        |               |
|-------|------------------------------|--------|---------------|
| Name  | OJ990525_02.9921.C71.o1.tm   | Method | TBLASTX:Maize |
| Start | 213                          | End    | 383           |
| GI    | none                         | Score  | 156           |
| Exons | 213..365, 213..383, 214..372 |        |               |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22274   | Seq. ID | OJ990415_05.9923.C1 |
| Gene No.    | 46399   | Strand  | +                   |
| Start       | 1   | End     | 708                 |
| Name        | OJ990415_05.9923.C1.o1.np                         | Method  | AAT/NAP             |
| Start       | 1   | End     | 708                 |
| GI          | 4680204   | Score   | 535                 |
| Exons       | 1..708  |         |                     |
| GI Descrip. | (AF114171) hypothetical protein [Sorghum bicolor] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22274                     | Seq. ID | OJ990415_05.9923.C1 |
| Gene No. | 46399                     | Strand  | +                   |
| Start    | 1                         | End     | 708                 |
| Name     | OJ990415_05.9923.C1.o1.gs | Method  | GENSCAN             |
| Start    | 5                         | End     | 508                 |
| GI       | none                      | Score   | 1                   |
| Exons    | 5..508                    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22274  | Seq. ID | OJ990415_05.9923.C1 |
| Gene No. | 46399  | Strand  | +                   |
| Start    | 1  | End     | 708                 |
| Name     | OJ990415_05.9923.C1.o1.tw                                  | Method  | TBLASTX:Wheat       |
| Start    | 102  | End     | 505                 |
| GI       | none   | Score   | 62                  |
| Exons    | 102..242, 102..212, 104..340, 104..253, 205..372, 335..505 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22275                     | Seq. ID | OJ990415_05.9923.C3 |
| Gene No. | 46400                     | Strand  | +                   |
| Start    | 304                       | End     | 654                 |
| Name     | OJ990415_05.9923.C3.o1.gs | Method  | GENSCAN             |
| Start    | 304                       | End     | 654                 |
| GI       | none                      | Score   | .47                 |
| Exons    | 304..412, 631..654        |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22276                     | Seq. ID | OJ990415_05.9923.C5 |
| Gene No. | 46401                     | Strand  | +                   |
| Start    | 352                       | End     | 711                 |
| Name     | OJ990415_05.9923.C5.o1.gs | Method  | GENSCAN             |
| Start    | 352                       | End     | 711                 |
| GI       | none                      | Score   | .62                 |
| Exons    | 352..400, 686..711        |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22277                     | Seq. ID | OJ990415_05.9923.C6 |
| Gene No. | 46402                     | Strand  | -                   |
| Start    | 1                         | End     | 912                 |
| Name     | OJ990415_05.9923.C6.o1.gp | Method  | AAT/GAP             |
| Start    | 1                         | End     | 434                 |
| GI       | none                      | Score   | 619                 |
| Exons    | 1..277, 365..434          |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22277 | Seq. ID | OJ990415_05.9923.C6 |
| Gene No. | 46402 | Strand  | -                   |
| Start    | 1     | End     | 912                 |

|             |   |        |         |
|-------------|---|--------|---------|
| Name        | OJ990415_05.9923.C6.o1.np                         | Method | AAT/NAP |
| Start       | 1   | End    | 912     |
| GI          | 5932553   | Score  | 221     |
| Exons       | 1..277, 365..416, 502..575, 659..708, 792..912    |        |         |
| GI Descríp. | (AC009465) putative kinase [Arabidopsis thaliana] |        |         |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22277   | Seq. ID | OJ990415_05.9923.C6 |
| Gene No. | 46402   | Strand  | -                   |
| Start    | 1   | End     | 912                 |
| Name     | OJ990415_05.9923.C6.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 2   | End     | 419                 |
| GI       | none  | Score   | 201                 |
| Exons    | 2..166, 3..164, 13..189, 128..277, 164..265, 165..278, 365..418, 365..418, 366..419 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22277   | Seq. ID | OJ990415_05.9923.C6 |
| Gene No. | 46402   | Strand  | -                   |
| Start    | 1   | End     | 912                 |
| Name     | OJ990415_05.9923.C6.o1.gs                       | Method  | GENSCAN             |
| Start    | 28  | End     | 852                 |
| GI       | none  | Score   | .59                 |
| Exons    | 28..325, 365..449, 502..575, 659..708, 792..852 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22277   | Seq. ID | OJ990415_05.9923.C6 |
| Gene No. | 46402   | Strand  | -                   |
| Start    | 1   | End     | 912                 |
| Name     | OJ990415_05.9923.C6.o1.ts   | Method  | TBLASTX:Soybean     |
| Start    | 92  | End     | 883                 |
| GI       | none  | Score   | 72                  |
| Exons    | 92..277, 192..278, 359..415, 366..416, 490..594, 543..575, 662..709, 790..873, 791..871, 791..883 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22277  | Seq. ID | OJ990415_05.9923.C6 |
| Gene No. | 46402  | Strand  | -                   |
| Start    | 1  | End     | 912                 |
| Name     | OJ990415_05.9923.C6.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 543  | End     | 883                 |
| GI       | none   | Score   | 56                  |
| Exons    | 543..575, 545..574, 545..580, 658..705, 659..709, 662..709, 786..866, 786..866, 790..873, 791..871, 791..883 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22277  | Seq. ID | OJ990415_05.9923.C6 |
| Gene No. | 46402  | Strand  | -                   |
| Start    | 1  | End     | 912                 |
| Name     | OJ990415_05.9923.C6.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 545  | End     | 883                 |
| GI       | none   | Score   | 56                  |
| Exons    | 545..574, 545..580, 654..710, 662..709, 789..872, 790..873, 790..873, 791..883 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22277                     | Seq. ID | OJ990415_05.9923.C6 |
| Gene No. | 46402                     | Strand  | -                   |
| Start    | 1                         | End     | 912                 |
| Name     | OJ990415_05.9923.C6.o2.gp | Method  | AAT/GAP             |
| Start    | 676                       | End     | 912                 |
| GI       | 60358 1.R1084             | Score   | 193                 |
| Exons    | 676..708, 792..912        |         |                     |

GI Descrip. '5932553/gb|AAD57008.1|AC009465\_22 2.0e-76 (AC009465) putative kinase [Arabidopsis thaliana]'

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22278                     | Seq. ID | OJ990415_05.9923.C8 |
| Gene No. | 46403                     | Strand  | +                   |
| Start    | 12                        | End     | 51                  |
| Name     | OJ990415_05.9923.C8.o1.gs | Method  | GENSCAN             |
| Start    | 12                        | End     | 51                  |
| GI       | none                      | Score   | 1                   |
| Exons    | 12..51                    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22279                     | Seq. ID | OJ990415_05.9923.C9 |
| Gene No. | 46404                     | Strand  | +                   |
| Start    | 137                       | End     | 430                 |
| Name     | OJ990415_05.9923.C9.o1.gs | Method  | GENSCAN             |
| Start    | 137                       | End     | 430                 |
| GI       | none                      | Score   | .43                 |
| Exons    | 137..217, 404..430        |         |                     |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22280   | Seq. ID | OJ990415_05.9923.C10 |
| Gene No.    | 46405   | Strand  | +                    |
| Start       | 635   | End     | 946                  |
| Name        | OJ990415_05.9923.C10.o1.gp  | Method  | AAT/GAP              |
| Start       | 635   | End     | 946                  |
| GI          | 72524_1.R1084   | Score   | 419                  |
| Exons       | 635..946  |         |                      |
| GI Descrip. | '5091496/dbj AB023482.2 AB023482 3.0e-84 Oryza sativa genomic DNA, chromosome 6, clone P0680A03, complete sequence' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22280   | Seq. ID | OJ990415_05.9923.C10 |
| Gene No.    | 46406   | Strand  | -                    |
| Start       | 1   | End     | 1023                 |
| Name        | OJ990415_05.9923.C10.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1023                 |
| GI          | 3492806   | Score   | 261                  |
| Exons       | 1..85, 135..453, 1002..1023   |         |                      |
| GI Descrip. | (AJ225045) adventitious rooting related oxygenase [Malus domestica] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22280                                  | Seq. ID | OJ990415_05.9923.C10 |
| Gene No. | 46406                                  | Strand  | -                    |
| Start    | 1                                      | End     | 1023                 |
| Name     | OJ990415_05.9923.C10.o1.ts             | Method  | TBLASTX:Soybean      |
| Start    | 124                                    | End     | 452                  |
| GI       | none                                   | Score   | 53                   |
| Exons    | 124..201, 210..371, 265..354, 369..452 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22280                      | Seq. ID | OJ990415_05.9923.C10 |
| Gene No. | 46406                      | Strand  | -                    |
| Start    | 1                          | End     | 1023                 |
| Name     | OJ990415_05.9923.C10.o1.gs | Method  | GENSCAN              |
| Start    | 135                        | End     | 688                  |
| GI       | none                       | Score   | .69                  |
| Exons    | 135..450, 624..688         |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22280 | Seq. ID | OJ990415_05.9923.C10 |
| Gene No. | 46406 | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 1  | End    | 1023          |
| Name  | OJ990415_05.9923.C10.o1.tm   | Method | TBLASTX:Maize |
| Start | 233  | End    | 473           |
| GI    | none   | Score  | 121           |
| Exons | 233..349, 234..368, 237..362, 262..363, 271..369, 369..473, 369..452 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22281                      | Seq. ID | OJ990415_05.9923.C12 |
| Gene No. | 46407                      | Strand  | +                    |
| Start    | 1006                       | End     | 1481                 |
| Name     | OJ990415_05.9923.C12.o1.gs | Method  | GENSCAN              |
| Start    | 1006                       | End     | 1481                 |
| GI       | none                       | Score   | .53                  |
| Exons    | 1006..1091, 1354..1481     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22282                      | Seq. ID | OJ990415_05.9923.C14 |
| Gene No. | 46408                      | Strand  | +                    |
| Start    | 440                        | End     | 620                  |
| Name     | OJ990415_05.9923.C14.o1.gs | Method  | GENSCAN              |
| Start    | 440                        | End     | 620                  |
| GI       | none                       | Score   | .95                  |
| Exons    | 440..620                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22282                      | Seq. ID | OJ990415_05.9923.C14 |
| Gene No. | 46409                      | Strand  | -                    |
| Start    | 44                         | End     | 622                  |
| Name     | OJ990415_05.9923.C14.o1.gp | Method  | AAT/GAP              |
| Start    | 44                         | End     | 622                  |
| GI       | none                       | Score   | 1031                 |
| Exons    | 44..622                    |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22282                                  | Seq. ID | OJ990415_05.9923.C14 |
| Gene No. | 46409                                  | Strand  | -                    |
| Start    | 44                                     | End     | 622                  |
| Name     | OJ990415_05.9923.C14.o1.tm             | Method  | TBLASTX:Maize        |
| Start    | 425                                    | End     | 600                  |
| GI       | none                                   | Score   | 183                  |
| Exons    | 425..595, 452..595, 454..600, 454..600 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22283   | Seq. ID | OJ990415_05.9923.C15 |
| Gene No.    | 46410   | Strand  | +                    |
| Start       | 1   | End     | 304                  |
| Name        | OJ990415_05.9923.C15.o1.gp                                    | Method  | AAT/GAP              |
| Start       | 1   | End     | 299                  |
| GI          | 36795_1.R1084   | Score   | 460                  |
| Exons       | 1..299  |         |                      |
| GI Descrip. | '3935185 5.0e-12 (AC004557) F17L21.28 [Arabidopsis thaliana]' |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22283   | Seq. ID | OJ990415_05.9923.C15 |
| Gene No. | 46410   | Strand  | +                    |
| Start    | 1   | End     | 304                  |
| Name     | OJ990415_05.9923.C15.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 1   | End     | 304                  |
| GI       | none  | Score   | 68                   |
| Exons    | 1..84, 10..90, 90..164, 91..177, 166..225, 166..216, 185..304, 257..304 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22284   | Seq. ID | OJ990415_05.9923.C16 |
| Gene No.    | 46411   | Strand  | -                    |
| Start       | 1   | End     | 355                  |
| Name        | OJ990415_05.9923.C16.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 355                  |
| GI          | 3193291   | Score   | 119                  |
| Exons       | 1..140, 276..355  |         |                      |
| GI Descrip. | (AF069298) Similar to DNA mismatch repair protein; T14P8.6 [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22284                      | Seq. ID | OJ990415_05.9923.C16 |
| Gene No. | 46411                      | Strand  | -                    |
| Start    | 1                          | End     | 355                  |
| Name     | OJ990415_05.9923.C16.o1.gs | Method  | GENSCAN              |
| Start    | 67                         | End     | 140                  |
| GI       | none                       | Score   | .76                  |
| Exons    | 67..140                    |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22285   | Seq. ID | OJ990415_05.9923.C17 |
| Gene No.    | 46412   | Strand  | +                    |
| Start       | 171   | End     | 488                  |
| Name        | OJ990415_05.9923.C17.o2.gp  | Method  | AAT/GAP              |
| Start       | 171   | End     | 488                  |
| GI          | 72524_1.R1084   | Score   | 417                  |
| Exons       | 171..488  |         |                      |
| GI Descrip. | '5091496/dbj AB023482.2 AB023482 3.0e-84 Oryza sativa genomic DNA, chromosome 6, clone P0680A03, complete sequence' |         |                      |

|          |                               |         |                      |
|----------|-------------------------------|---------|----------------------|
| Seq. No. | 22285                         | Seq. ID | OJ990415_05.9923.C17 |
| Gene No. | 46413                         | Strand  | +                    |
| Start    | 435                           | End     | 1629                 |
| Name     | OJ990415_05.9923.C17.o1.gs    | Method  | GENSCAN              |
| Start    | 435                           | End     | 1564                 |
| GI       | none                          | Score   | .59                  |
| Exons    | 435..499, 567..627, 925..1564 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22285  | Seq. ID | OJ990415_05.9923.C17 |
| Gene No.    | 46413  | Strand  | +                    |
| Start       | 435  | End     | 1629                 |
| Name        | OJ990415_05.9923.C17.o1.np                     | Method  | AAT/NAP              |
| Start       | 864  | End     | 1629                 |
| GI          | 5091513  | Score   | 1024                 |
| Exons       | 864..1629                                      |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22286  | Seq. ID | OJ990415_05.9923.C18 |
| Gene No.    | 46414  | Strand  | +                    |
| Start       | 1  | End     | 1840                 |
| Name        | OJ990415_05.9923.C18.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 1840                 |
| GI          | 5091513  | Score   | 1207                 |
| Exons       | 1..257, 991..1840                              |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22287 | Seq. ID | OJ990415_05.9923.C19 |
| Gene No. | 46415 | Strand  | +                    |
| Start    | 130   | End     | 1871                 |

|       |   |        |         |
|-------|---|--------|---------|
| Name  | OJ990415_05.9923.C19.o1.gs                | Method | GENSCAN |
| Start | 130                                       | End    | 1871    |
| GI    | none                                      | Score  | .82     |
| Exons | 130..551, 817..940, 987..1209, 1513..1871 |        |         |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22287  | Seq. ID | OJ990415_05.9923.C19 |
| Gene No.    | 46416  | Strand  | -                    |
| Start       | 64   | End     | 883                  |
| Name        | OJ990415_05.9923.C19.o1.np   | Method  | AAT/NAP              |
| Start       | 64   | End     | 883                  |
| GI          | 5091512  | Score   | 1034                 |
| Exons       | 64..484, 532..659, 701..883  |         |                      |
| GI Descrip. | (AB023482) Similar to Plasmodium vivax circumsporozoite protein gene, complete cds.(M11926) [Oryza sativa] |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22287  | Seq. ID | OJ990415_05.9923.C19 |
| Gene No.    | 46417  | Strand  | -                    |
| Start       | 3452   | End     | 3757                 |
| Name        | OJ990415_05.9923.C19.o1.gp   | Method  | AAT/GAP              |
| Start       | 3452   | End     | 3557                 |
| GI          | 5816518  | Score   | 154                  |
| Exons       | 3452..3557   |         |                      |
| GI Descrip. | 4521193/dbj AB013450.1 AB013450 3.0e-40 Oryza sativa DNA, similar sequence to Pib gene |         |                      |

  

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22287   | Seq. ID | OJ990415_05.9923.C19 |
| Gene No.    | 46417   | Strand  | -                    |
| Start       | 3452  | End     | 3757                 |
| Name        | OJ990415_05.9923.C19.o2.gp  | Method  | AAT/GAP              |
| Start       | 3452  | End     | 3757                 |
| GI          | 72524_1.R1084   | Score   | 415                  |
| Exons       | 3452..3757  |         |                      |
| GI Descrip. | '5091496/dbj AB023482.2 AB023482 3.0e-84 Oryza sativa genomic DNA, chromosome 6, clone P0680A03, complete sequence' |         |                      |

  

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22288   | Seq. ID | OJ990415_05.9923.C20 |
| Gene No.    | 46418   | Strand  | +                    |
| Start       | 110   | End     | 3181                 |
| Name        | OJ990415_05.9923.C20.o1.np  | Method  | AAT/NAP              |
| Start       | 110   | End     | 373                  |
| GI          | 3492806   | Score   | 176                  |
| Exons       | 110..373  |         |                      |
| GI Descrip. | (AJ225045) adventitious rooting related oxygenase [Malus domestica] |         |                      |

  

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22288                                       | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46418                                       | Strand  | +                    |
| Start    | 110   | End     | 3181                 |
| Name     | OJ990415_05.9923.C20.o1.gs                  | Method  | GENSCAN              |
| Start    | 128   | End     | 3181                 |
| GI       | none  | Score   | .53                  |
| Exons    | 128..235, 800..1070, 2684..2921, 2989..3181 |         |                      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22288                      | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46419                      | Strand  | +                    |
| Start    | 3804                       | End     | 4252                 |
| Name     | OJ990415_05.9923.C20.o2.gp | Method  | AAT/GAP              |

|       |            |       |      |
|-------|------------|-------|------|
| Start | 3804       | End   | 4252 |
| GI    | none       | Score | 889  |
| Exons | 3804..4252 |       |      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22288  | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46420  | Strand  | +                    |
| Start    | 10639  | End     | 15686                |
| Name     | OJ990415_05.9923.C20.o3.gs   | Method  | GENSCAN              |
| Start    | 10639  | End     | 15686                |
| GI       | none   | Score   | .8                   |
| Exons    | 10639..10690, 10987..11154, 11448..11519, 12521..12549, 12954..13276, 13402..13543, 13887..13965, 14059..14183, 14793..14894, 15004..15072, 15549..15686 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22288  | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46420  | Strand  | +                    |
| Start    | 10639  | End     | 15686                |
| Name     | OJ990415_05.9923.C20.o4.np   | Method  | AAT/NAP              |
| Start    | 13035  | End     | 15683                |
| GI       | 6862953  | Score   | 1071                 |
| Exons    | 13035..13142, 13179..13276, 13402..13543, 13887..13965, 14059..14183, 14793..14894, 15004..15072, 15158..15256, 15549..15683 |         |                      |

GI Descrip. (AC019018) unknown protein [Arabidopsis thaliana]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22288                      | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46421                      | Strand  | +                    |
| Start    | 15681                      | End     | 15839                |
| Name     | OJ990415_05.9923.C20.o3.gp | Method  | AAT/GAP              |
| Start    | 15681                      | End     | 15839                |
| GI       | none                       | Score   | 265                  |
| Exons    | 15681..15839               |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22288   | Seq. ID | OJ990415_05.9923.C20 |
| Gene No.    | 46422   | Strand  | +                    |
| Start       | 16996   | End     | 18913                |
| Name        | OJ990415_05.9923.C20.o4.gp  | Method  | AAT/GAP              |
| Start       | 16943   | End     | 18913                |
| GI          | 18112_1.R1084   | Score   | 1723                 |
| Exons       | 16943..17210, 17308..17414, 18252..18433, 18528..18913  |         |                      |
| GI Descrip. | '464621/sp P34091 RL6_MESCR 6.0e-65 60S RIBOSOMAL PROTEIN L6 (YL16-LIKE) >gi_280374_pir_S28586 ribosomal protein ML16 - common ice plant >gi_19539_emb_CAA49175_ (X69378) ribosomal protein YL16 [Mesembryanthemum crystallinum]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22288   | Seq. ID | OJ990415_05.9923.C20 |
| Gene No.    | 46422   | Strand  | +                    |
| Start       | 16996   | End     | 18913                |
| Name        | OJ990415_05.9923.C20.o5.np  | Method  | AAT/NAP              |
| Start       | 16964   | End     | 18680                |
| GI          | 464621  | Score   | 652                  |
| Exons       | 16964..17210, 17308..17414, 18252..18433, 18528..18680  |         |                      |
| GI Descrip. | 60S RIBOSOMAL PROTEIN L6 (YL16-LIKE) gi 280374 pir  S28586 ribosomal protein ML16 - common ice plant gi 19539 emb CAA49175  (X69378) ribosomal protein YL16 [Mesembryanthemum crystallinum] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22288 | Seq. ID | OJ990415_05.9923.C20 |
|----------|-------|---------|----------------------|



|          |  |        |         |
|----------|--|--------|---------|
| Gene No. | 46422  | Strand | +       |
| Start    | 16996  | End    | 18913   |
| Name     | OJ990415_05.9923.C20.o4.gs                             | Method | GENSCAN |
| Start    | 16996  | End    | 18683   |
| GI       | none   | Score  | .83     |
| Exons    | 16996..17210, 17308..17414, 18252..18433, 18528..18683 |        |         |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22288   | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46423   | Strand  | +                    |
| Start    | 19188   | End     | 26490                |
| Name     | OJ990415_05.9923.C20.o5.gs  | Method  | GENSCAN              |
| Start    | 19188   | End     | 26490                |
| GI       | none  | Score   | .44                  |
| Exons    | 19188..19283, 19288..19330, 20876..20955, 21039..21175,<br>21266..21365, 21760..21971, 22901..22947, 23533..23672,<br>23889..23979, 24721..24812, 25102..25176, 25318..25409,<br>25862..25991, 26425..26490 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22288   | Seq. ID | OJ990415_05.9923.C20 |
| Gene No.    | 46424   | Strand  | -                    |
| Start       | 2441  | End     | 2789                 |
| Name        | OJ990415_05.9923.C20.o1.gp  | Method  | AAT/GAP              |
| Start       | 2441  | End     | 2789                 |
| GI          | 366_4.R1084   | Score   | 635                  |
| Exons       | 2441..2789  |         |                      |
| GI Descrip. | '4521193/dbj AB013450.1 AB013450 3.0e-40 Oryza sativa DNA,<br>similar sequence to Pib gene' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22288                                  | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46425                                  | Strand  | -                    |
| Start    | 3802                                   | End     | 18813                |
| Name     | OJ990415_05.9923.C20.o6.tm             | Method  | TBLASTX:Maize        |
| Start    | 112                                    | End     | 370                  |
| GI       | none                                   | Score   | 187                  |
| Exons    | 112..273, 128..265, 280..357, 323..370 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22288  | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46425  | Strand  | -                    |
| Start    | 3802   | End     | 18813                |
| Name     | OJ990415_05.9923.C20.o2.gs   | Method  | GENSCAN              |
| Start    | 3802   | End     | 10021                |
| GI       | none   | Score   | .75                  |
| Exons    | 3802..4191, 4299..4421, 4513..5201, 5898..6084, 6330..6380,<br>6464..6629, 7020..7504, 8029..8299, 8570..8654, 9973..10021 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22288   | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46425   | Strand  | -                    |
| Start    | 3802  | End     | 18813                |
| Name     | OJ990415_05.9923.C20.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 4042  | End     | 5107                 |
| GI       | none  | Score   | 124                  |
| Exons    | 4042..4137, 4050..4148, 4125..4301, 4186..4293, 4308..4364,<br>4321..4365, 4344..4421, 4369..4422, 4513..4719, 4521..4727,<br>4523..4723, 4591..4965, 4808..4870, 4912..5094, 4921..5091,<br>4925..5107 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22288 | Seq. ID | OJ990415_05.9923.C20 |
|----------|-------|---------|----------------------|

Gene No. 46425 Strand -  
 Start 3802 End 18813  
 Name OJ990415\_05.9923.C20.o2.np Method AAT/NAP  
 Start 4071 End 7483  
 GI 2702277 Score 1378  
 Exons 4071..4817, 4860..5273, 5937..6123, 6330..6380, 6464..6629,  
 7020..7483  
 GI Descrip. (AC003033) putative serine/threonine protein kinase [Arabidopsis  
 thaliana]

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
 Gene No. 46425 Strand -  
 Start 3802 End 18813  
 Name OJ990415\_05.9923.C20.o6.ts Method TBLASTX:Soybean  
 Start 4544 End 5091  
 GI none Score 68  
 Exons 4544..4687, 4546..4737, 4735..4818, 5014..5091

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
 Gene No. 46425 Strand -  
 Start 3802 End 18813  
 Name OJ990415\_05.9923.C20.o5.tm Method TBLASTX:Maize  
 Start 5108 End 7139  
 GI none Score 83  
 Exons 5108..5203, 5108..5203, 5109..5225, 5704..5814, 5714..5821,  
 5733..5822, 5916..6119, 5923..6120, 5941..6123, 5942..6124,  
 6328..6381, 6330..6383, 6330..6383, 6461..6631, 6461..6631,  
 6463..6633, 7001..7138, 7020..7139

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
 Gene No. 46425 Strand -  
 Start 3802 End 18813  
 Name OJ990415\_05.9923.C20.o4.ts Method TBLASTX:Soybean  
 Start 5755 End 6125  
 GI none Score 56  
 Exons 5755..5811, 5756..5812, 5883..6116, 5896..6123, 5897..6124,  
 5907..6125

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
 Gene No. 46425 Strand -  
 Start 3802 End 18813  
 Name OJ990415\_05.9923.C20.o2.tm Method TBLASTX:Maize  
 Start 7139 End 7537  
 GI none Score 409  
 Exons 7139..7537, 7142..7486

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
 Gene No. 46425 Strand -  
 Start 3802 End 18813  
 Name OJ990415\_05.9923.C20.o1.ts Method TBLASTX:Soybean  
 Start 7157 End 7484  
 GI none Score 285  
 Exons 7157..7483, 7158..7484

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
 Gene No. 46425 Strand -  
 Start 3802 End 18813

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990415_05.9923.C20.o3.tm   | Method | TBLASTX:Maize |
| Start | 8208   | End    | 18812         |
| GI    | none   | Score  | 63            |
| Exons | 8208..8297, 16989..17090, 16995..17102, 16996..17214, 17305..17409, 17305..17415, 17306..17416, 18247..18390, 18248..18433, 18255..18437, 18256..18438, 18525..18686, 18527..18682, 18528..18683, 18610..18702, 18708..18758, 18723..18812, 18731..18757, 18763..18810 |        |               |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22288   | Seq. ID | OJ990415_05.9923.C20 |
| Gene No.    | 46425   | Strand  | -                    |
| Start       | 3802  | End     | 18813                |
| Name        | OJ990415_05.9923.C20.o3.np                              | Method  | AAT/NAP              |
| Start       | 8619  | End     | 8891                 |
| GI          | 4539386   | Score   | 69                   |
| Exons       | 8619..8891  |         |                      |
| GI Descrip. | (AL035526) extensin-like protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22288  | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46425  | Strand  | -                    |
| Start    | 3802   | End     | 18813                |
| Name     | OJ990415_05.9923.C20.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 13077  | End     | 13528                |
| GI       | none   | Score   | 98                   |
| Exons    | 13077..13145, 13085..13144, 13224..13289, 13226..13288, 13402..13476, 13403..13495, 13446..13487, 13487..13528, 13496..13528 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22288  | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46425  | Strand  | -                    |
| Start    | 3802   | End     | 18813                |
| Name     | OJ990415_05.9923.C20.o3.tc   | Method  | TBLASTX:Cress        |
| Start    | 13077  | End     | 14096                |
| GI       | none   | Score   | 73                   |
| Exons    | 13077..13142, 13224..13277, 13396..13542, 13400..13543, 13863..13958, 13884..13952, 13886..13963, 14055..14096 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22288  | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46425  | Strand  | -                    |
| Start    | 3802   | End     | 18813                |
| Name     | OJ990415_05.9923.C20.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 13080  | End     | 15764                |
| GI       | none   | Score   | 89                   |
| Exons    | 13080..13139, 13085..13138, 13220..13270, 13221..13277, 13399..13542, 13400..13543, 13403..13543, 13866..13964, 13885..13965, 13886..13963, 14034..14186, 14036..14179, 14058..14198, 14786..14890, 14790..14897, 14792..14890, 14967..15074, 15001..15075, 15001..15072, 15150..15257, 15157..15255, 15158..15259, 15544..15696, 15544..15678, 15705..15764 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22288                      | Seq. ID | OJ990415_05.9923.C20 |
| Gene No. | 46425                      | Strand  | -                    |
| Start    | 3802                       | End     | 18813                |
| Name     | OJ990415_05.9923.C20.o5.ts | Method  | TBLASTX:Soybean      |
| Start    | 13083                      | End     | 13964                |
| GI       | none                       | Score   | 66                   |

Exons 13083..13142, 13224..13277, 13399..13542, 13400..13543,  
13865..13963, 13866..13964

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
Gene No. 46425 Strand -  
Start 3802 End 18813  
Name OJ990415\_05.9923.C20.o2.ts Method TBLASTX:Soybean  
Start 14078 End 15253  
GI none Score 142  
Exons 14078..14173, 14079..14192, 14787..14897, 14789..14893,  
15000..15074, 15001..15075, 15122..15244, 15157..15249,  
15158..15253

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
Gene No. 46425 Strand -  
Start 3802 End 18813  
Name OJ990415\_05.9923.C20.o2.tc Method TBLASTX:Cress  
Start 14781 End 15226  
GI none Score 186  
Exons 14781..14897, 14781..14897, 14786..14899, 15001..15078,  
15001..15072, 15003..15074, 15143..15211, 15157..15222,  
15158..15226

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
Gene No. 46425 Strand -  
Start 3802 End 18813  
Name OJ990415\_05.9923.C20.o3.ts Method TBLASTX:Soybean  
Start 17011 End 18683  
GI none Score 105  
Exons 17011..17097, 17043..17102, 17143..17214, 17305..17415,  
17306..17416, 18248..18433, 18250..18390, 18255..18434,  
18268..18435, 18527..18682, 18533..18664, 18540..18683,  
18540..18683

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
Gene No. 46425 Strand -  
Start 3802 End 18813  
Name OJ990415\_05.9923.C20.o1.tc Method TBLASTX:Cress  
Start 17014 End 18737  
GI none Score 111  
Exons 17014..17103, 17143..17214, 17305..17415, 17306..17416,  
18248..18433, 18250..18369, 18252..18377, 18534..18737,  
18542..18670

Seq. No. 22288 Seq. ID OJ990415\_05.9923.C20  
Gene No. 46425 Strand -  
Start 3802 End 18813  
Name OJ990415\_05.9923.C20.o1.tw Method TBLASTX:Wheat  
Start 18329 End 18813  
GI none Score 141  
Exons 18329..18433, 18329..18358, 18337..18393, 18351..18446,  
18352..18435, 18525..18752, 18527..18682, 18527..18757,  
18528..18722, 18610..18753, 18732..18812, 18733..18813,  
18754..18813

Seq. No. 22289 Seq. ID OJ990415\_05.9923.C21  
Gene No. 46426 Strand +

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 77   | End    | 1475          |
| Name  | OJ990415_05.9923.C21.o1.tm   | Method | TBLASTX:Maize |
| Start | 71   | End    | 1284          |
| GI    | none   | Score  | 154           |
| Exons | 71..169, 74..169, 75..236, 85..177, 337..414, 343..414, 348..431, 351..416, 514..579, 516..581, 773..796, 774..794, 792..866, 794..865, 953..1066, 964..1101, 966..1085, 970..1089, 1220..1276, 1222..1284 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22289                                    | Seq. ID | OJ990415_05.9923.C21 |
| Gene No. | 46426                                    | Strand  | +                    |
| Start    | 77                                       | End     | 1475                 |
| Name     | OJ990415_05.9923.C21.o1.gs               | Method  | GENSCAN              |
| Start    | 77                                       | End     | 1475                 |
| GI       | none                                     | Score   | .78                  |
| Exons    | 77..168, 296..415, 969..1089, 1314..1475 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22290                      | Seq. ID | OJ990415_05.9923.C22 |
| Gene No. | 46427                      | Strand  | +                    |
| Start    | 283                        | End     | 402                  |
| Name     | OJ990415_05.9923.C22.o1.gs | Method  | GENSCAN              |
| Start    | 283                        | End     | 402                  |
| GI       | none                       | Score   | .8                   |
| Exons    | 283..402                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22290  | Seq. ID | OJ990415_05.9923.C22 |
| Gene No. | 46428  | Strand  | -                    |
| Start    | 1908   | End     | 7125                 |
| Name     | OJ990415_05.9923.C22.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1674   | End     | 2079                 |
| GI       | none   | Score   | 46                   |
| Exons    | 1674..1703, 1676..1702, 1795..1827, 1807..1827, 1901..2074, 1902..2069, 1903..2079 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22290  | Seq. ID | OJ990415_05.9923.C22 |
| Gene No. | 46428  | Strand  | -                    |
| Start    | 1908   | End     | 7125                 |
| Name     | OJ990415_05.9923.C22.o2.gs   | Method  | GENSCAN              |
| Start    | 1908   | End     | 7125                 |
| GI       | none   | Score   | .49                  |
| Exons    | 1908..2351, 4707..4999, 5295..5351, 5714..5839, 6163..6351, 7020..7125 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22291  | Seq. ID | OJ990415_05.9923.C23 |
| Gene No. | 46429  | Strand  | +                    |
| Start    | 432  | End     | 4207                 |
| Name     | OJ990415_05.9923.C23.o1.gs                                       | Method  | GENSCAN              |
| Start    | 432  | End     | 4207                 |
| GI       | none   | Score   | .53                  |
| Exons    | 432..611, 665..696, 753..785, 1426..1521, 2343..2513, 4190..4207 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22291                      | Seq. ID | OJ990415_05.9923.C23 |
| Gene No. | 46430                      | Strand  | -                    |
| Start    | 2848                       | End     | 5596                 |
| Name     | OJ990415_05.9923.C23.o1.np | Method  | AAT/NAP              |
| Start    | 2848                       | End     | 5596                 |
| GI       | 2130154                    | Score   | 101                  |

Exons 2848..2936, 4209..4381, 5544..5596  
 GI Descrip. hypothetical protein 241 - maize chloroplast  
 gi|902268|emb|CAA60333| (X86563) ORF241 [Zea mays]  
 gi|902303|emb|CAA60367| (X86563) ORF241 [Zea mays]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22292                      | Seq. ID | OJ990415_05.9923.C24 |
| Gene No. | 46431                      | Strand  | +                    |
| Start    | 1103                       | End     | 1284                 |
| Name     | OJ990415_05.9923.C24.o1.gs | Method  | GENSCAN              |
| Start    | 1103                       | End     | 1284                 |
| GI       | none                       | Score   | .41                  |
| Exons    | 1103..1186, 1204..1284     |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22292   | Seq. ID | OJ990415_05.9923.C24 |
| Gene No.    | 46432   | Strand  | +                    |
| Start       | 12668   | End     | 13624                |
| Name        | OJ990415_05.9923.C24.o2.np  | Method  | AAT/NAP              |
| Start       | 12668   | End     | 13624                |
| GI          | 6069646   | Score   | 383                  |
| Exons       | 12668..13624  |         |                      |
| GI Descrip. | (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi 6907112 dbj BAA90639.1  (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22292  | Seq. ID | OJ990415_05.9923.C24 |
| Gene No. | 46433  | Strand  | -                    |
| Start    | 9771   | End     | 13560                |
| Name     | OJ990415_05.9923.C24.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 9381   | End     | 13560                |
| GI       | none   | Score   | 50                   |
| Exons    | 9381..9452, 9539..9649, 9883..9993, 10060..10350, 13043..13207, 13072..13200, 13203..13358, 13207..13560, 13479..13520 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22292   | Seq. ID | OJ990415_05.9923.C24 |
| Gene No.    | 46433   | Strand  | -                    |
| Start       | 9771  | End     | 13560                |
| Name        | OJ990415_05.9923.C24.o1.np  | Method  | AAT/NAP              |
| Start       | 9771  | End     | 11828                |
| GI          | 6069646   | Score   | 842                  |
| Exons       | 9771..10750, 11039..11828   |         |                      |
| GI Descrip. | (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi 6907112 dbj BAA90639.1  (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22292  | Seq. ID | OJ990415_05.9923.C24 |
| Gene No. | 46433  | Strand  | -                    |
| Start    | 9771   | End     | 13560                |
| Name     | OJ990415_05.9923.C24.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 10474  | End     | 12928                |
| GI       | none   | Score   | 104                  |
| Exons    | 10474..10563, 10576..10755, 10577..10756, 12674..12814, 12821..12928 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22292                      | Seq. ID | OJ990415_05.9923.C24 |
| Gene No. | 46433                      | Strand  | -                    |
| Start    | 9771                       | End     | 13560                |
| Name     | OJ990415_05.9923.C24.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 10654                      | End     | 11199                |
| GI       | none                       | Score   | 141                  |
| Exons    | 10654..10782, 10849..11199 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22292                      | Seq. ID | OJ990415_05.9923.C24 |
| Gene No. | 46433                      | Strand  | -                    |
| Start    | 9771                       | End     | 13560                |
| Name     | OJ990415_05.9923.C24.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 10732                      | End     | 11175                |
| GI       | none                       | Score   | 208                  |
| Exons    | 10732..10782, 10882..11175 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22292  | Seq. ID | OJ990415_05.9923.C24 |
| Gene No. | 46433  | Strand  | -                    |
| Start    | 9771   | End     | 13560                |
| Name     | OJ990415_05.9923.C24.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 10819  | End     | 11517                |
| GI       | none   | Score   | 112                  |
| Exons    | 10819..11505, 10820..11089, 11123..11269, 11315..11506, 11350..11517 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22292                      | Seq. ID | OJ990415_05.9923.C24 |
| Gene No. | 46433                      | Strand  | -                    |
| Start    | 9771                       | End     | 13560                |
| Name     | OJ990415_05.9923.C24.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 11503                      | End     | 11838                |
| GI       | none                       | Score   | 150                  |
| Exons    | 11503..11580, 11587..11838 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22292                                    | Seq. ID | OJ990415_05.9923.C24 |
| Gene No. | 46433                                    | Strand  | -                    |
| Start    | 9771                                     | End     | 13560                |
| Name     | OJ990415_05.9923.C24.o2.tm               | Method  | TBLASTX:Maize        |
| Start    | 11518                                    | End     | 11838                |
| GI       | none                                     | Score   | 108                  |
| Exons    | 11518..11838, 11530..11814, 11618..11830 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22293  | Seq. ID | OJ990415_05.9923.C25 |
| Gene No.    | 46434  | Strand  | +                    |
| Start       | 1138   | End     | 1650                 |
| Name        | OJ990415_05.9923.C25.o1.gp   | Method  | AAT/GAP              |
| Start       | 1138   | End     | 1650                 |
| GI          | 30050_1.R1084  | Score   | 948                  |
| Exons       | 1138..1650   |         |                      |
| GI Descrip. | '4454483/gb AAD20930  5.0e-11 (AC006234) putative kinase, 5' partial [Arabidopsis thaliana]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22293                      | Seq. ID | OJ990415_05.9923.C25 |
| Gene No. | 46435                      | Strand  | -                    |
| Start    | 1135                       | End     | 1624                 |
| Name     | OJ990415_05.9923.C25.o1.gs | Method  | GENSCAN              |
| Start    | 1135                       | End     | 1623                 |
| GI       | none                       | Score   | .97                  |

Exons 1135..1623

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22293  | Seq. ID | OJ990415_05.9923.C25 |
| Gene No. | 46435  | Strand  | -                    |
| Start    | 1135   | End     | 1624                 |
| Name     | OJ990415_05.9923.C25.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 1470   | End     | 1624                 |
| GI       | none   | Score   | 113                  |
| Exons    | 1470..1550, 1471..1557, 1541..1573, 1567..1623, 1568..1624 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22294   | Seq. ID | OJ990415_05.9923.C26 |
| Gene No.    | 46436   | Strand  | +                    |
| Start       | 1   | End     | 5706                 |
| Name        | OJ990415_05.9923.C26.o1.np                                      | Method  | AAT/NAP              |
| Start       | 1   | End     | 5706                 |
| GI          | 3980411   | Score   | 61                   |
| Exons       | 1..104, 267..353, 5274..5372, 5532..5706                        |         |                      |
| GI Descrip. | (AC004561) putative proline-rich protein [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22294  | Seq. ID | OJ990415_05.9923.C26 |
| Gene No.    | 46437  | Strand  | +                    |
| Start       | 5759   | End     | 7280                 |
| Name        | OJ990415_05.9923.C26.o1.gp   | Method  | AAT/GAP              |
| Start       | 5759   | End     | 7280                 |
| GI          | 60358_1.R1084  | Score   | 1035                 |
| Exons       | 5759..5959, 6057..6123, 6379..6444, 6550..6596, 6695..6740, 6854..6934, 7022..7064, 7166..7280 |         |                      |
| GI Descrip. | '5932553/gb AAD57008.1 AC009465_22 2.0e-76 (AC009465) putative kinase [Arabidopsis thaliana]'  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22294  | Seq. ID | OJ990415_05.9923.C26 |
| Gene No. | 46437  | Strand  | +                    |
| Start    | 5759   | End     | 7280                 |
| Name     | OJ990415_05.9923.C26.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 5873   | End     | 7054                 |
| GI       | none   | Score   | 125                  |
| Exons    | 5873..5959, 5874..5960, 6054..6137, 6055..6144, 6376..6444, 6378..6440, 6561..6602, 6562..6603, 6696..6740, 6851..6934, 6856..6933, 7012..7053, 7016..7054 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22294  | Seq. ID | OJ990415_05.9923.C26 |
| Gene No. | 46437  | Strand  | +                    |
| Start    | 5759   | End     | 7280                 |
| Name     | OJ990415_05.9923.C26.o2.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 5873   | End     | 6142                 |
| GI       | none   | Score   | 134                  |
| Exons    | 5873..5962, 5874..5960, 6018..6122, 6053..6142, 6055..6129 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22294  | Seq. ID | OJ990415_05.9923.C26 |
| Gene No.    | 46437  | Strand  | +                    |
| Start       | 5759   | End     | 7280                 |
| Name        | OJ990415_05.9923.C26.o2.np   | Method  | AAT/NAP              |
| Start       | 5874   | End     | 7280                 |
| GI          | 5932553  | Score   | 330                  |
| Exons       | 5874..5959, 6057..6123, 6379..6444, 6550..6596, 6695..6740, 6854..6934, 7022..7064, 7166..7280 |         |                      |
| GI Descrip. | (AC009465) putative kinase [Arabidopsis thaliana]  |         |                      |



|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22294  | Seq. ID | OJ990415_05.9923.C26 |
| Gene No. | 46437  | Strand  | +                    |
| Start    | 5759   | End     | 7280                 |
| Name     | OJ990415_05.9923.C26.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 6381   | End     | 7239                 |
| GI       | none   | Score   | 98                   |
| Exons    | 6381..6437, 6381..6443, 6382..6444, 6537..6602, 6547..6603, 6692..6739, 6696..6740, 6699..6740, 6836..6934, 6846..6926, 6853..6933, 7012..7056, 7016..7063, 7156..7239, 7164..7226 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22294  | Seq. ID | OJ990415_05.9923.C26 |
| Gene No. | 46437  | Strand  | +                    |
| Start    | 5759   | End     | 7280                 |
| Name     | OJ990415_05.9923.C26.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 6549   | End     | 7239                 |
| GI       | none   | Score   | 83                   |
| Exons    | 6549..6596, 6550..6597, 6550..6597, 6666..6740, 6696..6740, 6826..6933, 6836..6934, 7012..7059, 7016..7063, 7156..7239, 7164..7226 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22295                      | Seq. ID | OJ990415_05.9923.C27 |
| Gene No. | 46438                      | Strand  | +                    |
| Start    | 1                          | End     | 306                  |
| Name     | OJ990415_05.9923.C27.o1.gp | Method  | AAT/GAP              |
| Start    | 1                          | End     | 306                  |
| GI       | none                       | Score   | 531                  |
| Exons    | 1..306                     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22295                      | Seq. ID | OJ990415_05.9923.C27 |
| Gene No. | 46439                      | Strand  | +                    |
| Start    | 220                        | End     | 827                  |
| Name     | OJ990415_05.9923.C27.o1.gs | Method  | GENSCAN              |
| Start    | 220                        | End     | 827                  |
| GI       | none                       | Score   | .74                  |
| Exons    | 220..405, 748..827         |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22295   | Seq. ID | OJ990415_05.9923.C27 |
| Gene No.    | 46439   | Strand  | +                    |
| Start       | 220   | End     | 827                  |
| Name        | OJ990415_05.9923.C27.o1.np                        | Method  | AAT/NAP              |
| Start       | 298   | End     | 475                  |
| GI          | 5932553   | Score   | 115                  |
| Exons       | 298..475  |         |                      |
| GI Descrip. | (AC009465) putative kinase [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22295                      | Seq. ID | OJ990415_05.9923.C27 |
| Gene No. | 46440                      | Strand  | -                    |
| Start    | 212                        | End     | 733                  |
| Name     | OJ990415_05.9923.C27.o2.gp | Method  | AAT/GAP              |
| Start    | 212                        | End     | 733                  |
| GI       | 3767718                    | Score   | 935                  |
| Exons    | 212..733                   |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22295 | Seq. ID | OJ990415_05.9923.C27 |
| Gene No. | 46441 | Strand  | -                    |
| Start    | 9692  | End     | 10012                |

|       |                                    |        |               |
|-------|------------------------------------|--------|---------------|
| Name  | OJ990415_05.9923.C27.o1.tw         | Method | TBLASTX:Wheat |
| Start | 2                                  | End    | 266           |
| GI    | none                               | Score  | 120           |
| Exons | 2..157, 2..130, 131..250, 132..266 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22295                                  | Seq. ID | OJ990415_05.9923.C27 |
| Gene No. | 46441                                  | Strand  | -                    |
| Start    | 9692                                   | End     | 10012                |
| Name     | OJ990415_05.9923.C27.o1.tm             | Method  | TBLASTX:Maize        |
| Start    | 131                                    | End     | 475                  |
| GI       | none                                   | Score   | 79                   |
| Exons    | 131..226, 132..227, 209..475, 213..464 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22295                      | Seq. ID | OJ990415_05.9923.C27 |
| Gene No. | 46441                      | Strand  | -                    |
| Start    | 9692                       | End     | 10012                |
| Name     | OJ990415_05.9923.C27.o3.gs | Method  | GENSCAN              |
| Start    | 9692                       | End     | 10012                |
| GI       | none                       | Score   | .75                  |
| Exons    | 9692..10012                |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22296                      | Seq. ID | OJ990415_05.9923.C28 |
| Gene No. | 46442                      | Strand  | +                    |
| Start    | 1037                       | End     | 1453                 |
| Name     | OJ990415_05.9923.C28.o1.gs | Method  | GENSCAN              |
| Start    | 1037                       | End     | 1453                 |
| GI       | none                       | Score   | .85                  |
| Exons    | 1037..1453                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22296  | Seq. ID | OJ990415_05.9923.C28 |
| Gene No.    | 46443  | Strand  | +                    |
| Start       | 3791   | End     | 9150                 |
| Name        | OJ990415_05.9923.C28.o1.np                     | Method  | AAT/NAP              |
| Start       | 3548   | End     | 6269                 |
| GI          | 3935185  | Score   | 399                  |
| Exons       | 3548..3635, 3911..4254, 5387..6112, 6140..6269 |         |                      |
| GI Descrip. | (AC004557) F17L21.28 [Arabidopsis thaliana]    |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22296   | Seq. ID | OJ990415_05.9923.C28 |
| Gene No.    | 46443   | Strand  | +                    |
| Start       | 3791  | End     | 9150                 |
| Name        | OJ990415_05.9923.C28.o1.gp                                    | Method  | AAT/GAP              |
| Start       | 3586  | End     | 5396                 |
| GI          | 12452_2.R1084   | Score   | 1313                 |
| Exons       | 3586..4206, 5340..5396  |         |                      |
| GI Descrip. | '3935185 4.0e-15 (AC004557) F17L21.28 [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22296  | Seq. ID | OJ990415_05.9923.C28 |
| Gene No. | 46443  | Strand  | +                    |
| Start    | 3791   | End     | 9150                 |
| Name     | OJ990415_05.9923.C28.o2.gs                     | Method  | GENSCAN              |
| Start    | 3791   | End     | 9150                 |
| GI       | none   | Score   | .51                  |
| Exons    | 3791..4206, 5340..6237, 8822..8925, 8967..9150 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22296 | Seq. ID | OJ990415_05.9923.C28 |
| Gene No. | 46443 | Strand  | +                    |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Start       | 3791  | End     | 9150                 |
| Name        | OJ990415_05.9923.C28.o2.gp  | Method  | AAT/GAP              |
| Start       | 5648  | End     | 5823                 |
| GI          | none  | Score   | 335                  |
| Exons       | 5648..5823  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22296   | Seq. ID | OJ990415_05.9923.C28 |
| Gene No.    | 46444   | Strand  | -                    |
| Start       | 5942  | End     | 6474                 |
| Name        | OJ990415_05.9923.C28.o2.tm  | Method  | TBLASTX:Maize        |
| Start       | 3786  | End     | 4203                 |
| GI          | none  | Score   | 52                   |
| Exons       | 3786..3833, 3822..3836, 3902..4201, 3913..4029, 4090..4203  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22296   | Seq. ID | OJ990415_05.9923.C28 |
| Gene No.    | 46444   | Strand  | -                    |
| Start       | 5942  | End     | 6474                 |
| Name        | OJ990415_05.9923.C28.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 5345  | End     | 5730                 |
| GI          | none  | Score   | 227                  |
| Exons       | 5345..5599, 5355..5600, 5355..5729, 5356..5730  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22296   | Seq. ID | OJ990415_05.9923.C28 |
| Gene No.    | 46444   | Strand  | -                    |
| Start       | 5942  | End     | 6474                 |
| Name        | OJ990415_05.9923.C28.o3.tm  | Method  | TBLASTX:Maize        |
| Start       | 5936  | End     | 6237                 |
| GI          | none  | Score   | 77                   |
| Exons       | 5936..5986, 5937..5987, 5941..6003, 5992..6237, 6031..6234  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22296   | Seq. ID | OJ990415_05.9923.C28 |
| Gene No.    | 46444   | Strand  | -                    |
| Start       | 5942  | End     | 6474                 |
| Name        | OJ990415_05.9923.C28.o3.gp  | Method  | AAT/GAP              |
| Start       | 5942  | End     | 6474                 |
| GI          | 36795_1.R1084   | Score   | 942                  |
| Exons       | 5942..6474  |         |                      |
| GI Descrip. | '3935185 5.0e-12 (AC004557) F17L21.28 [Arabidopsis thaliana]'   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22297   | Seq. ID | OJ990415_05.9923.C29 |
| Gene No.    | 46445   | Strand  | +                    |
| Start       | 136   | End     | 1739                 |
| Name        | OJ990415_05.9923.C29.o1.gs  | Method  | GENSCAN              |
| Start       | 136   | End     | 1739                 |
| GI          | none  | Score   | .55                  |
| Exons       | 136..363, 543..1739   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22297   | Seq. ID | OJ990415_05.9923.C29 |
| Gene No.    | 46445   | Strand  | +                    |
| Start       | 136   | End     | 1739                 |
| Name        | OJ990415_05.9923.C29.o1.np  | Method  | AAT/NAP              |
| Start       | 480   | End     | 1528                 |
| GI          | 130582  | Score   | 546                  |
| Exons       | 480..1528   |         |                      |
| GI Descrip. | RETROVIRUS-RELATED POL POLYPROTEIN FROM TRANSPOSON TNT 1-94<br>[CONTAINS: PROTEASE ; REVERSE TRANSCRIPTASE ; ENDONUCLEASE]<br>gi 100342 pir  S04273 hypothetical protein - common tobacco |         |                      |

gi|20045|emb|CAA32025| (X13777) ORF [Nicotiana tabacum]

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22297  | Seq. ID | OJ990415_05.9923.C29 |
| Gene No.    | 46446  | Strand  | +                    |
| Start       | 7112   | End     | 9279                 |
| Name        | OJ990415_05.9923.C29.o2.np                     | Method  | AAT/NAP              |
| Start       | 7112   | End     | 9279                 |
| GI          | 3935185  | Score   | 459                  |
| Exons       | 7112..7193, 7760..8039, 8334..9124, 9152..9279 |         |                      |
| GI Descrip. | (AC004557) F17L21.28 [Arabidopsis thaliana]    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22297                      | Seq. ID | OJ990415_05.9923.C29 |
| Gene No. | 46446                      | Strand  | +                    |
| Start    | 7112                       | End     | 9279                 |
| Name     | OJ990415_05.9923.C29.o3.gs | Method  | GENSCAN              |
| Start    | 7663                       | End     | 8070                 |
| GI       | none                       | Score   | .98                  |
| Exons    | 7663..8070                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22297   | Seq. ID | OJ990415_05.9923.C29 |
| Gene No.    | 46446   | Strand  | +                    |
| Start       | 7112  | End     | 9279                 |
| Name        | OJ990415_05.9923.C29.o1.gp                                  | Method  | AAT/GAP              |
| Start       | 8428  | End     | 8756                 |
| GI          | 700222  | Score   | 650                  |
| Exons       | 8428..8756  |         |                      |
| GI Descrip. | 3935185 5.0e-12 (AC004557) F17L21.28 [Arabidopsis thaliana] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22297   | Seq. ID | OJ990415_05.9923.C29 |
| Gene No.    | 46447   | Strand  | +                    |
| Start       | 10018   | End     | 10443                |
| Name        | OJ990415_05.9923.C29.o2.gp  | Method  | AAT/GAP              |
| Start       | 10018   | End     | 10443                |
| GI          | LIB3479-006-Q6-K1-B11   | Score   | 632                  |
| Exons       | 10018..10443  |         |                      |
| GI Descrip. | '5734616/dbj AP000391.1 AP000391 1.0e-110 Oryza sativa genomic DNA, chromosome 6, clone:P0538C01' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22297  | Seq. ID | OJ990415_05.9923.C29 |
| Gene No.    | 46448  | Strand  | +                    |
| Start       | 15942  | End     | 16022                |
| Name        | OJ990415_05.9923.C29.o3.gp   | Method  | AAT/GAP              |
| Start       | 15942  | End     | 16022                |
| GI          | 38012_1.R1084  | Score   | 103                  |
| Exons       | 15942..16022   |         |                      |
| GI Descrip. | '4097947/gb U72255 OSU72255 2.0e-23 Oryza sativa beta-1,3-glucanase precursor (Gns9) gene, complete cds' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22297                      | Seq. ID | OJ990415_05.9923.C29 |
| Gene No. | 46449                      | Strand  | +                    |
| Start    | 18818                      | End     | 19051                |
| Name     | OJ990415_05.9923.C29.o6.gp | Method  | AAT/GAP              |
| Start    | 18818                      | End     | 19051                |
| GI       | 5004924                    | Score   | 364                  |
| Exons    | 18818..19051               |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22297 | Seq. ID | OJ990415_05.9923.C29 |
|----------|-------|---------|----------------------|

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 46450  | Strand | -       |
| Start       | 7639   | End    | 10237   |
| Name        | OJ990415_05.9923.C29.o3.np                     | Method | AAT/NAP |
| Start       | 7639   | End    | 10237   |
| GI          | 6539570  | Score  | 174     |
| Exons       | 7639..7718, 9804..9886, 10034..10237           |        |         |
| GI Descrip. | (AP000836) hypothetical protein [Oryza sativa] |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22297  | Seq. ID | OJ990415_05.9923.C29 |
| Gene No. | 46451  | Strand  | -                    |
| Start    | 11869  | End     | 15441                |
| Name     | OJ990415_05.9923.C29.o5.gs   | Method  | GENSCAN              |
| Start    | 11869  | End     | 15441                |
| GI       | none   | Score   | .65                  |
| Exons    | 11869..11993, 13128..13351, 13515..13660, 13675..13806, 14274..14301, 15188..15441 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22297  | Seq. ID | OJ990415_05.9923.C29 |
| Gene No. | 46452  | Strand  | -                    |
| Start    | 20817  | End     | 21268                |
| Name     | OJ990415_05.9923.C29.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 7732   | End     | 21268                |
| GI       | none   | Score   | 114                  |
| Exons    | 7732..7848, 7750..7860, 7788..7853, 7851..8027, 7851..8027, 7852..8061, 20943..21062, 20961..21059, 20963..21061, 20981..21067, 20998..21066, 21068..21268, 21070..21267 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22297  | Seq. ID | OJ990415_05.9923.C29 |
| Gene No. | 46452  | Strand  | -                    |
| Start    | 20817  | End     | 21268                |
| Name     | OJ990415_05.9923.C29.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 8366   | End     | 16409                |
| GI       | none   | Score   | 186                  |
| Exons    | 8366..8632, 8367..8693, 8367..8717, 8371..8724, 8374..8718, 16067..16204, 16068..16340, 16069..16389, 16084..16230, 16086..16409 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22297  | Seq. ID | OJ990415_05.9923.C29 |
| Gene No. | 46452  | Strand  | -                    |
| Start    | 20817  | End     | 21268                |
| Name     | OJ990415_05.9923.C29.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 8963   | End     | 17185                |
| GI       | none   | Score   | 64                   |
| Exons    | 8963..9043, 8964..9044, 8964..9047, 8965..9045, 9030..9242, 9049..9246, 9049..9246, 16882..16929, 16882..17001, 16970..17020, 17009..17095, 17022..17096, 17096..17176, 17102..17185 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22297                      | Seq. ID | OJ990415_05.9923.C29 |
| Gene No. | 46452                      | Strand  | -                    |
| Start    | 20817                      | End     | 21268                |
| Name     | OJ990415_05.9923.C29.o7.gs | Method  | GENSCAN              |
| Start    | 20817                      | End     | 21266                |
| GI       | none                       | Score   | .44                  |
| Exons    | 20817..21020, 21038..21266 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22298 | Seq. ID | OJ990415_05.9923.C30 |
|----------|-------|---------|----------------------|

|          |   |        |         |
|----------|---|--------|---------|
| Gene No. | 46453   | Strand | -       |
| Start    | 195   | End    | 1945    |
| Name     | OJ990415_05.9923.C30.ol.gs                                      | Method | GENSCAN |
| Start    | 195   | End    | 1945    |
| GI       | none  | Score  | .93     |
| Exons    | 195..267, 352..462, 560..733, 843..1528, 1530..1672, 1798..1945 |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22298                                  | Seq. ID | OJ990415_05.9923.C30 |
| Gene No. | 46453                                  | Strand  | -                    |
| Start    | 195                                    | End     | 1945                 |
| Name     | OJ990415_05.9923.C30.ol.tw             | Method  | TBLASTX:Wheat        |
| Start    | 393                                    | End     | 916                  |
| GI       | none                                   | Score   | 68                   |
| Exons    | 393..464, 565..747, 572..697, 836..916 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22299  | Seq. ID | OJ990415_05.9923.C31 |
| Gene No.    | 46454  | Strand  | -                    |
| Start       | 1  | End     | 529                  |
| Name        | OJ990415_05.9923.C31.ol.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 529                  |
| GI          | 5091513  | Score   | 856                  |
| Exons       | 1..529   |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22299                      | Seq. ID | OJ990415_05.9923.C31 |
| Gene No. | 46454                      | Strand  | -                    |
| Start    | 1                          | End     | 529                  |
| Name     | OJ990415_05.9923.C31.ol.gs | Method  | GENSCAN              |
| Start    | 58                         | End     | 382                  |
| GI       | none                       | Score   | .55                  |
| Exons    | 58..382                    |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22300   | Seq. ID | OJ990415_05.9923.C32 |
| Gene No.    | 46455   | Strand  | -                    |
| Start       | 115   | End     | 930                  |
| Name        | OJ990415_05.9923.C32.ol.np  | Method  | AAT/NAP              |
| Start       | 115   | End     | 514                  |
| GI          | 3492806   | Score   | 226                  |
| Exons       | 115..514  |         |                      |
| GI Descrip. | (AJ225045) adventitious rooting related oxygenase [Malus domestica] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22300  | Seq. ID | OJ990415_05.9923.C32 |
| Gene No.    | 46455  | Strand  | -                    |
| Start       | 115  | End     | 930                  |
| Name        | OJ990415_05.9923.C32.ol.ts   | Method  | TBLASTX:Soybean      |
| Start       | 149  | End     | 497                  |
| GI          | 5753428  | Score   | 149                  |
| Exons       | 149..496, 174..497   |         |                      |
| GI Descrip. | 3492806/emb_CAA12386_2.0e-54 (AJ225045) adventitious rooting related oxygenase [Malus domestica] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22300                      | Seq. ID | OJ990415_05.9923.C32 |
| Gene No. | 46455                      | Strand  | -                    |
| Start    | 115                        | End     | 930                  |
| Name     | OJ990415_05.9923.C32.ol.tm | Method  | TBLASTX:Maize        |
| Start    | 158                        | End     | 490                  |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| GI       | none                         | Score   | 257                  |
| Exons    | 158..490, 159..404, 440..490 |         |                      |
| Seq. No. | 22300                        | Seq. ID | OJ990415_05.9923.C32 |
| Gene No. | 46455                        | Strand  | -                    |
| Start    | 115                          | End     | 930                  |
| Name     | OJ990415_05.9923.C32.o1.gs   | Method  | GENSCAN              |
| Start    | 159                          | End     | 930                  |
| GI       | none                         | Score   | .48                  |
| Exons    | 159..589, 773..930           |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22300                      | Seq. ID | OJ990415_05.9923.C32 |
| Gene No. | 46455                      | Strand  | -                    |
| Start    | 115                        | End     | 930                  |
| Name     | OJ990415_05.9923.C32.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 201                        | End     | 406                  |
| GI       | none                       | Score   | 118                  |
| Exons    | 201..401, 209..406         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22301                                    | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46456                                    | Strand  | +                    |
| Start    | 15972                                    | End     | 18856                |
| Name     | OJ990415_05.9923.C33.o1.gp               | Method  | AAT/GAP              |
| Start    | 15972                                    | End     | 18856                |
| GI       | none                                     | Score   | 1522                 |
| Exons    | 15972..16152, 16478..16567, 18308..18856 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22301   | Seq. ID | OJ990415_05.9923.C33 |
| Gene No.    | 46456   | Strand  | +                    |
| Start       | 15972   | End     | 18856                |
| Name        | OJ990415_05.9923.C33.o2.np                        | Method  | AAT/NAP              |
| Start       | 16083   | End     | 18437                |
| GI          | 6714455   | Score   | 249                  |
| Exons       | 16083..16152, 16477..16567, 18308..18437          |         |                      |
| GI Descrip. | (AC011620) unknown protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22301                      | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46457                      | Strand  | +                    |
| Start    | 23921                      | End     | 25024                |
| Name     | OJ990415_05.9923.C33.o4.gs | Method  | GENSCAN              |
| Start    | 23921                      | End     | 24980                |
| GI       | none                       | Score   | .66                  |
| Exons    | 23921..24184, 24288..24980 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No.    | 46457  | Strand  | +                    |
| Start       | 23921  | End     | 25024                |
| Name        | OJ990415_05.9923.C33.o3.np   | Method  | AAT/NAP              |
| Start       | 24310  | End     | 25024                |
| GI          | 6815062  | Score   | 376                  |
| Exons       | 24310..25024   |         |                      |
| GI Descrip. | (AP001080) Similar to Arabidopsis thaliana chromosome II BAC F16P2 genomic sequence;mudrA like protein (AC004561) [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22301 | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46458 | Strand  | -                    |

|       |  |        |         |
|-------|--|--------|---------|
| Start | 23   | End    | 12778   |
| Name  | OJ990415_05.9923.C33.o1.gs   | Method | GENSCAN |
| Start | 23   | End    | 12764   |
| GI    | none   | Score  | .82     |
| Exons | 23..39, 106..354, 511..696, 1397..1499, 1923..2063, 2638..2698, 2944..3065, 3531..3730, 3951..4046, 7315..7414, 7697..7878, 7959..8062, 8762..8827, 9002..9075, 9872..9998, 10086..10336, 10715..11941, 12080..12216, 12245..12764 |        |         |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22301   | Seq. ID | OJ990415_05.9923.C33 |
| Gene No.    | 46458   | Strand  | -                    |
| Start       | 23  | End     | 12778                |
| Name        | OJ990415_05.9923.C33.o1.np  | Method  | AAT/NAP              |
| Start       | 7259  | End     | 12778                |
| GI          | 3193291   | Score   | 1615                 |
| Exons       | 7259..7414, 7697..7878, 7959..8062, 8762..8827, 9002..9075, 9211..9290, 9898..10085, 10975..11725, 11786..11941, 12133..12468, 12518..12778 |         |                      |
| GI Descrip. | (AF069298) Similar to DNA mismatch repair protein; T14P8.6 [Arabidopsis thaliana]   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22301                                    | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46459                                    | Strand  | -                    |
| Start    | 13544                                    | End     | 16562                |
| Name     | OJ990415_05.9923.C33.o2.gs               | Method  | GENSCAN              |
| Start    | 13544                                    | End     | 16562                |
| GI       | none                                     | Score   | .4                   |
| Exons    | 13544..13660, 13690..13799, 16493..16562 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22301                        | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46460                        | Strand  | -                    |
| Start    | 18280                        | End     | 23222                |
| Name     | OJ990415_05.9923.C33.o5.tm   | Method  | TBLASTX:Maize        |
| Start    | 107                          | End     | 334                  |
| GI       | none                         | Score   | 212                  |
| Exons    | 107..334, 108..332, 119..334 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46460  | Strand  | -                    |
| Start    | 18280  | End     | 23222                |
| Name     | OJ990415_05.9923.C33.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 506  | End     | 1501                 |
| GI       | none   | Score   | 244                  |
| Exons    | 506..754, 510..740, 1389..1475, 1391..1489, 1393..1500, 1394..1501 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46460  | Strand  | -                    |
| Start    | 18280  | End     | 23222                |
| Name     | OJ990415_05.9923.C33.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1909   | End     | 3580                 |
| GI       | none   | Score   | 92                   |
| Exons    | 1909..2049, 1920..2063, 1931..2047, 2614..2700, 2927..3067, 2943..3092, 2943..3068, 3512..3580 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22301 | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46460 | Strand  | -                    |



|       |  |        |               |
|-------|--|--------|---------------|
| Start | 18280  | End    | 23222         |
| Name  | OJ990415_05.9923.C33.o4.tm                                 | Method | TBLASTX:Maize |
| Start | 7305   | End    | 7882          |
| GI    | none   | Score  | 121           |
| Exons | 7305..7415, 7316..7417, 7316..7417, 7694..7882, 7694..7882 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46460  | Strand  | -                    |
| Start    | 18280  | End     | 23222                |
| Name     | OJ990415_05.9923.C33.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 7325   | End     | 8031                 |
| GI       | none   | Score   | 72                   |
| Exons    | 7325..7417, 7335..7394, 7694..7864, 7694..7849, 7838..7879, 7954..8031, 7967..8002 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46460  | Strand  | -                    |
| Start    | 18280  | End     | 23222                |
| Name     | OJ990415_05.9923.C33.o8.tm   | Method  | TBLASTX:Maize        |
| Start    | 9211   | End     | 10162                |
| GI       | none   | Score   | 118                  |
| Exons    | 9211..9285, 9212..9280, 9218..9292, 9865..9999, 9865..9999, 9866..10000, 9869..10000, 10081..10152, 10083..10160, 10085..10162 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46460  | Strand  | -                    |
| Start    | 18280  | End     | 23222                |
| Name     | OJ990415_05.9923.C33.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 11605  | End     | 12216                |
| GI       | none   | Score   | 301                  |
| Exons    | 11605..11955, 11624..11956, 12125..12211, 12127..12210, 12130..12216 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22301                      | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46460                      | Strand  | -                    |
| Start    | 18280                      | End     | 23222                |
| Name     | OJ990415_05.9923.C33.o6.tm | Method  | TBLASTX:Maize        |
| Start    | 12561                      | End     | 12753                |
| GI       | none                       | Score   | 235                  |
| Exons    | 12561..12752, 12562..12753 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46460  | Strand  | -                    |
| Start    | 18280  | End     | 23222                |
| Name     | OJ990415_05.9923.C33.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 16076  | End     | 18447                |
| GI       | none   | Score   | 121                  |
| Exons    | 16076..16153, 16077..16154, 16104..16154, 16472..16570, 16473..16577, 16476..16568, 16477..16569, 18300..18446, 18305..18445, 18364..18447 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22301                      | Seq. ID | OJ990415_05.9923.C33 |
| Gene No. | 46460                      | Strand  | -                    |
| Start    | 18280                      | End     | 23222                |
| Name     | OJ990415_05.9923.C33.o3.gs | Method  | GENSCAN              |
| Start    | 18280                      | End     | 23222                |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| GI          | none   | Score   | .76                  |
| Exons       | 18280..18460, 20006..20340, 20727..20914, 21026..21085,<br>21688..22074, 22558..22851, 23162..23222  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No.    | 46460  | Strand  | -                    |
| Start       | 18280  | End     | 23222                |
| Name        | OJ990415_05.9923.C33.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 19611  | End     | 20996                |
| GI          | none   | Score   | 42                   |
| Exons       | 19611..19667, 19665..19724, 19666..19737, 20006..20341,<br>20007..20342, 20008..20370, 20008..20343, 20726..20983,<br>20727..20996, 20727..20990 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No.    | 46460  | Strand  | -                    |
| Start       | 18280  | End     | 23222                |
| Name        | OJ990415_05.9923.C33.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 20718  | End     | 21084                |
| GI          | none   | Score   | 176                  |
| Exons       | 20718..21077, 20719..20979, 20739..21077, 21043..21084   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No.    | 46460  | Strand  | -                    |
| Start       | 18280  | End     | 23222                |
| Name        | OJ990415_05.9923.C33.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 20769  | End     | 21089                |
| GI          | none   | Score   | 146                  |
| Exons       | 20769..20990, 20776..20967, 20785..21000, 21027..21089,<br>21031..21087  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22301  | Seq. ID | OJ990415_05.9923.C33 |
| Gene No.    | 46461  | Strand  | -                    |
| Start       | 23980  | End     | 24464                |
| Name        | OJ990415_05.9923.C33.o3.tm   | Method  | TBLASTX:Maize        |
| Start       | 23980  | End     | 24464                |
| GI          | none   | Score   | 59                   |
| Exons       | 23980..24096, 23985..24116, 24121..24183, 24122..24184,<br>24242..24457, 24285..24464, 24285..24461  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22302  | Seq. ID | OJ990415_05.9923.C34 |
| Gene No.    | 46462  | Strand  | +                    |
| Start       | 199  | End     | 606                  |
| Name        | OJ990415_05.9923.C34.o1.gs   | Method  | GENSCAN              |
| Start       | 199  | End     | 606                  |
| GI          | none   | Score   | .7                   |
| Exons       | 199..310, 527..606   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22303  | Seq. ID | OJ990415_05.9923.C35 |
| Gene No.    | 46463  | Strand  | -                    |
| Start       | 1  | End     | 1305                 |
| Name        | OJ990415_05.9923.C35.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 1305                 |
| GI          | 5932553  | Score   | 166                  |
| Exons       | 1..118, 202..283, 1057..1103, 1205..1305   |         |                      |
| GI Descrip. | (AC009465) putative kinase [Arabidopsis thaliana]  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22303  | Seq. ID | OJ990415_05.9923.C35 |
| Gene No. | 46463  | Strand  | -                    |
| Start    | 1  | End     | 1305                 |
| Name     | OJ990415_05.9923.C35.ol.tm   | Method  | TBLASTX:Maize        |
| Start    | 64   | End     | 1262                 |
| GI       | none   | Score   | 80                   |
| Exons    | 64..120, 72..119, 200..283, 200..283, 1030..1113, 1043..1105, 1206..1262, 1213..1257 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22303   | Seq. ID | OJ990415_05.9923.C35 |
| Gene No. | 46463   | Strand  | -                    |
| Start    | 1   | End     | 1305                 |
| Name     | OJ990415_05.9923.C35.ol.tw  | Method  | TBLASTX:Wheat        |
| Start    | 68  | End     | 1276                 |
| GI       | none  | Score   | 77                   |
| Exons    | 68..115, 69..119, 72..119, 196..276, 196..276, 200..283, 201..281, 1030..1113, 1043..1105, 1206..1262, 1210..1257, 1214..1276 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22303                                    | Seq. ID | OJ990415_05.9923.C35 |
| Gene No. | 46463                                    | Strand  | -                    |
| Start    | 1  | End     | 1305                 |
| Name     | OJ990415_05.9923.C35.ol.gs               | Method  | GENSCAN              |
| Start    | 69                                       | End     | 1274                 |
| GI       | none                                     | Score   | .88                  |
| Exons    | 69..118, 202..283, 997..1103, 1205..1274 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22303   | Seq. ID | OJ990415_05.9923.C35 |
| Gene No. | 46463   | Strand  | -                    |
| Start    | 1   | End     | 1305                 |
| Name     | OJ990415_05.9923.C35.ol.ts                          | Method  | TBLASTX:Soybean      |
| Start    | 72  | End     | 1244                 |
| GI       | none  | Score   | 106                  |
| Exons    | 72..119, 200..283, 201..281, 1078..1113, 1203..1244 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22303   | Seq. ID | OJ990415_05.9923.C35 |
| Gene No.    | 46463   | Strand  | -                    |
| Start       | 1   | End     | 1305                 |
| Name        | OJ990415_05.9923.C35.ol.gp  | Method  | AAT/GAP              |
| Start       | 86  | End     | 1305                 |
| GI          | 60358_1.R1084   | Score   | 329                  |
| Exons       | 86..118, 202..283, 1057..1103, 1205..1305   |         |                      |
| GI Descrip. | '5932553/gb AAD57008.1 AC009465_22 2.0e-76 (AC009465) putative kinase [Arabidopsis thaliana]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22304  | Seq. ID | OJ990415_05.9923.C36 |
| Gene No.    | 46464  | Strand  | -                    |
| Start       | 1  | End     | 425                  |
| Name        | OJ990415_05.9923.C36.ol.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 425                  |
| GI          | 5091513  | Score   | 485                  |
| Exons       | 1..425   |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22304 | Seq. ID | OJ990415_05.9923.C36 |
| Gene No. | 46464 | Strand  | -                    |
| Start    | 1     | End     | 425                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Name        | OJ990415_05.9923.C36.ol.gs  | Method  | GENSCAN              |
| Start       | 68  | End     | 386                  |
| GI          | none  | Score   | .95                  |
| Exons       | 68..386   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22305   | Seq. ID | OJ990415_05.9923.C39 |
| Gene No.    | 46465   | Strand  | +                    |
| Start       | 169   | End     | 354                  |
| Name        | OJ990415_05.9923.C39.ol.gs  | Method  | GENSCAN              |
| Start       | 169   | End     | 354                  |
| GI          | none  | Score   | .97                  |
| Exons       | 169..354  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22305   | Seq. ID | OJ990415_05.9923.C39 |
| Gene No.    | 46466   | Strand  | +                    |
| Start       | 667   | End     | 810                  |
| Name        | OJ990415_05.9923.C39.ol.gp  | Method  | AAT/GAP              |
| Start       | 667   | End     | 810                  |
| GI          | 21474_1.R1084   | Score   | 232                  |
| Exons       | 667..810  |         |                      |
| GI Descrip. | '3894159 2.0e-10 (AC005312) hypothetical protein [Arabidopsis thaliana]'  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22306   | Seq. ID | OJ990415_05.9923.C42 |
| Gene No.    | 46467   | Strand  | -                    |
| Start       | 1   | End     | 484                  |
| Name        | OJ990415_05.9923.C42.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 484                  |
| GI          | 130582  | Score   | 345                  |
| Exons       | 1..484  |         |                      |
| GI Descrip. | RETROVIRUS-RELATED POL POLYPROTEIN FROM TRANSPOSON TNT 1-94 [CONTAINS: PROTEASE ; REVERSE TRANSCRIPTASE ; ENDONUCLEASE] gi 100342 pir  S04273 hypothetical protein - common tobacco gi 20045 emb CAA32025  (X13777) ORF [Nicotiana tabacum] |         |                      |
|             |   |         |                      |
| Seq. No.    | 22307   | Seq. ID | OJ990415_05.9923.C43 |
| Gene No.    | 46468   | Strand  | -                    |
| Start       | 77  | End     | 299                  |
| Name        | OJ990415_05.9923.C43.ol.gs  | Method  | GENSCAN              |
| Start       | 77  | End     | 299                  |
| GI          | none  | Score   | .53                  |
| Exons       | 77..299   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22308   | Seq. ID | OJ990415_05.9923.C44 |
| Gene No.    | 46469   | Strand  | +                    |
| Start       | 127   | End     | 161                  |
| Name        | OJ990415_05.9923.C44.ol.gs  | Method  | GENSCAN              |
| Start       | 127   | End     | 161                  |
| GI          | none  | Score   | .52                  |
| Exons       | 127..161  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22309   | Seq. ID | OJ990415_01.9922.C1  |
| Gene No.    | 46470   | Strand  | +                    |
| Start       | 343   | End     | 777                  |
| Name        | OJ990415_01.9922.C1.ol.tm   | Method  | TBLASTX:Maize        |
| Start       | 293   | End     | 777                  |
| GI          | none  | Score   | 140                  |

Exons 293..484, 294..383, 298..522, 312..524, 334..525, 338..526,  
516..773, 528..773, 529..777

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22309                     | Seq. ID | OJ990415_01.9922.C1 |
| Gene No. | 46470                     | Strand  | +                   |
| Start    | 343                       | End     | 777                 |
| Name     | OJ990415_01.9922.C1.ol.gs | Method  | GENSCAN             |
| Start    | 343                       | End     | 664                 |
| GI       | none                      | Score   | .65                 |
| Exons    | 343..664                  |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22309  | Seq. ID | OJ990415_01.9922.C1 |
| Gene No.    | 46470  | Strand  | +                   |
| Start       | 343  | End     | 777                 |
| Name        | OJ990415_01.9922.C1.ol.np  | Method  | AAT/NAP             |
| Start       | 484  | End     | 777                 |
| GI          | 6016737  | Score   | 247                 |
| Exons       | 484..777   |         |                     |
| GI Descrip. | (AC009325) hypothetical protein [Arabidopsis thaliana]<br>gi 6091741 gb AAF03453.1 AC010797_29 (AC010797) hypothetical<br>protein [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22309                     | Seq. ID | OJ990415_01.9922.C1 |
| Gene No. | 46470                     | Strand  | +                   |
| Start    | 343                       | End     | 777                 |
| Name     | OJ990415_01.9922.C1.ol.ts | Method  | TBLASTX:Soybean     |
| Start    | 493                       | End     | 777                 |
| GI       | none                      | Score   | 281                 |
| Exons    | 493..777, 525..773        |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22309                                  | Seq. ID | OJ990415_01.9922.C1 |
| Gene No. | 46470                                  | Strand  | +                   |
| Start    | 343                                    | End     | 777                 |
| Name     | OJ990415_01.9922.C1.ol.tc              | Method  | TBLASTX:Cress       |
| Start    | 529                                    | End     | 771                 |
| GI       | none                                   | Score   | 81                  |
| Exons    | 529..600, 531..599, 615..758, 616..771 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22310   | Seq. ID | OJ990415_01.9922.C2 |
| Gene No.    | 46471   | Strand  | +                   |
| Start       | 1   | End     | 868                 |
| Name        | OJ990415_01.9922.C2.ol.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 868                 |
| GI          | 119714  | Score   | 222                 |
| Exons       | 1..26, 84..868  |         |                     |
| GI Descrip. | EXTENSIN PRECURSOR (CELL WALL HYDROXYPROLINE-RICH GLYCOPROTEIN)<br>gi 82169 pir  S06733 hydroxyproline-rich glycoprotein precursor<br>- common tobacco gi 19867 emb CAA32090  (X13885) extensin (AA<br>1-620) [Nicotiana tabacum] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22310                     | Seq. ID | OJ990415_01.9922.C2 |
| Gene No. | 46471                     | Strand  | +                   |
| Start    | 1                         | End     | 868                 |
| Name     | OJ990415_01.9922.C2.ol.gs | Method  | GENSCAN             |
| Start    | 721                       | End     | 858                 |
| GI       | none                      | Score   | .8                  |
| Exons    | 721..858                  |         |                     |

Seq. No. 22311  
 Gene No. 46472  
 Start 446  
 Name OJ990415\_01.9922.C6.o1.gs  
 Start 446  
 GI none  
 Exons 446..531, 573..645

Seq. ID OJ990415\_01.9922.C6  
 Strand -  
 End 645  
 Method GENSCAN  
 End 645  
 Score .77

Seq. No. 22312  
 Gene No. 46473  
 Start 119  
 Name OJ990415\_01.9922.C11.o1.tm  
 Start 97  
 GI none  
 Exons 97..231, 98..205, 109..207, 192..269, 196..270, 199..261, 206..271, 348..581, 349..582, 350..583, 351..581, 577..729, 584..739, 585..740, 585..740, 592..741

Seq. ID OJ990415\_01.9922.C11  
 Strand -  
 End 2859  
 Method TBLASTX:Maize  
 End 741  
 Score 161

Seq. No. 22312  
 Gene No. 46473  
 Start 119  
 Name OJ990415\_01.9922.C11.o1.np  
 Start 103  
 GI 4559351  
 Exons 103..265, 350..1010, 1138..1214  
 GI Descrip. (AC006585) hypothetical protein [Arabidopsis thaliana]

Seq. ID OJ990415\_01.9922.C11  
 Strand -  
 End 2859  
 Method AAT/NAP  
 End 1214  
 Score 354

Seq. No. 22312  
 Gene No. 46473  
 Start 119  
 Name OJ990415\_01.9922.C11.o1.gs  
 Start 119  
 GI none  
 Exons 119..265, 350..1003, 1081..1169, 2823..2859

Seq. ID OJ990415\_01.9922.C11  
 Strand -  
 End 2859  
 Method GENSCAN  
 End 2859  
 Score .84

Seq. No. 22312  
 Gene No. 46473  
 Start 119  
 Name OJ990415\_01.9922.C11.o1.gp  
 Start 674  
 GI 568707  
 Exons 674..961

Seq. ID OJ990415\_01.9922.C11  
 Strand -  
 End 2859  
 Method AAT/GAP  
 End 961  
 Score 485

Seq. No. 22313  
 Gene No. 46474  
 Start 1  
 Name OJ990415\_01.9922.C13.o1.np  
 Start 1  
 GI 6016737  
 Exons 1..45, 1094..1522  
 GI Descrip. (AC009325) hypothetical protein [Arabidopsis thaliana]  
 gi|6091741|gb|AAF03453.1|AC010797\_29 (AC010797) hypothetical protein [Arabidopsis thaliana]

Seq. ID OJ990415\_01.9922.C13  
 Strand +  
 End 5069  
 Method AAT/NAP  
 End 1522  
 Score 284

Seq. No. 22313  
 Gene No. 46474

Seq. ID OJ990415\_01.9922.C13  
 Strand +

|       |   |        |         |
|-------|---|--------|---------|
| Start | 1   | End    | 5069    |
| Name  | OJ990415_01.9922.C13.o1.gs  | Method | GENSCAN |
| Start | 388   | End    | 4982    |
| GI    | none  | Score  | .68     |
| Exons | 388..567, 844..1582, 1660..1708, 1792..1856, 1966..2020, 2763..2813, 3538..3604, 4434..4629, 4713..4982 |        |         |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22313  | Seq. ID | OJ990415_01.9922.C13 |
| Gene No.    | 46474  | Strand  | +                    |
| Start       | 1  | End     | 5069                 |
| Name        | OJ990415_01.9922.C13.o1.gp   | Method  | AAT/GAP              |
| Start       | 1368   | End     | 2132                 |
| GI          | 12484_1.R1084  | Score   | 717                  |
| Exons       | 1368..1582, 1660..1708, 1792..1856, 1966..2020, 2094..2132                     |         |                      |
| GI Descrip. | '6015437/dbj AB008112.1 AB008112 1.0e-10 Homo sapiens PEX1 mRNA, complete cds' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22313  | Seq. ID | OJ990415_01.9922.C13 |
| Gene No.    | 46474  | Strand  | +                    |
| Start       | 1  | End     | 5069                 |
| Name        | OJ990415_01.9922.C13.o2.gp   | Method  | AAT/GAP              |
| Start       | 3346   | End     | 5069                 |
| GI          | 52805_1.R1084  | Score   | 1148                 |
| Exons       | 3346..3417, 3538..3604, 4508..4629, 4713..5069   |         |                      |
| GI Descrip. | '6016737/gb AAF01563.1 AC009325_33 4.0e-09 (AC009325) hypothetical protein [Arabidopsis thaliana]<br>>gi_6091741_gb_AAF03453.1 AC010797_29 (AC010797) hypothetical protein [Arabidopsis thaliana]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22313                      | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46475                      | Strand  | +                    |
| Start    | 6567                       | End     | 6987                 |
| Name     | OJ990415_01.9922.C13.o3.gp | Method  | AAT/GAP              |
| Start    | 6567                       | End     | 6987                 |
| GI       | none                       | Score   | 810                  |
| Exons    | 6567..6987                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22313   | Seq. ID | OJ990415_01.9922.C13 |
| Gene No.    | 46476   | Strand  | +                    |
| Start       | 7149  | End     | 7583                 |
| Name        | OJ990415_01.9922.C13.o4.gp  | Method  | AAT/GAP              |
| Start       | 7149  | End     | 7583                 |
| GI          | LIB3431-043-P1-K1-B9  | Score   | 843                  |
| Exons       | 7149..7583  |         |                      |
| GI Descrip. | '732174/sp P34498 YMS2_CAEEL 3.0e-54 PUTATIVE PRE-MRNA SPLICING FACTOR ATP-DEPENDENT RNA HELICASE K03H1.2<br>>gi_3878176_emb_CAA82662.1_ (Z29560) similar to DEAH subfamily RNA helicases, especially yeast pre-mRNA splicing factors 22 and 16; cDNA EST EMBL:D27770 comes from this gene; cDNA EST EMBL:D27769 comes from this gene; cDNA EST EMBL:D36247 comes from thi... >gi_4249768_gb_A' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22313                      | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477                      | Strand  | -                    |
| Start    | 6765                       | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o3.tm | Method  | TBLASTX:Maize        |
| Start    | 885                        | End     | 3609                 |

|       |  |       |     |
|-------|--|-------|-----|
| GI    | none   | Score | 140 |
| Exons | 885..1076, 886..975, 890..1114, 904..1116, 930..1118, 1101..1484, 1108..1539, 1121..1540, 1498..1608, 1499..1585, 1638..1706, 1648..1713, 1660..1713, 2090..2170, 2092..2169, 3307..3417, 3320..3418, 3321..3416, 3337..3417, 3526..3609, 3534..3554, 3539..3604 |       |     |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22313                              | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477                              | Strand  | -                    |
| Start    | 6765                               | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o3.ts         | Method  | TBLASTX:Soybean      |
| Start    | 1085                               | End     | 3417                 |
| GI       | none                               | Score   | 370                  |
| Exons    | 1085..1435, 1117..1437, 3337..3417 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22313  | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477  | Strand  | -                    |
| Start    | 6765   | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o3.tc                     | Method  | TBLASTX:Cress        |
| Start    | 1121   | End     | 1429                 |
| GI       | none   | Score   | 81                   |
| Exons    | 1121..1192, 1123..1191, 1207..1428, 1208..1429 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22313  | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477  | Strand  | -                    |
| Start    | 6765   | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o6.tm   | Method  | TBLASTX:Maize        |
| Start    | 4505   | End     | 5001                 |
| GI       | none   | Score   | 143                  |
| Exons    | 4505..4627, 4506..4643, 4713..4826, 4713..4826, 4829..4948, 4830..4958, 4836..4958, 4894..5001, 4894..4935, 4922..4981 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22313   | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477   | Strand  | -                    |
| Start    | 6765  | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o2.np  | Method  | AAT/NAP              |
| Start    | 6756  | End     | 12859                |
| GI       | 3024898   | Score   | 2741                 |
| Exons    | 6756..8361, 8450..8602, 8697..8758, 9047..9295, 9645..9812, 9905..10134, 10750..10891, 12794..12859 |         |                      |

GI Descrip. PRE-MRNA SPLICING FACTOR ATP-DEPENDENT RNA HELICASE PRP16 (KIAA0224) (HA4657) gi|1504028|dbj|BAA13213| (D86977) similar to putative ATP-dependent RNA helicase K03H1.2 of C.elegans(S41025) [Homo sapiens] gi|3123906 (AF038391) pre-mRNA splicing factor [Homo sapiens]

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22313   | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477   | Strand  | -                    |
| Start    | 6765  | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o2.gs  | Method  | GENSCAN              |
| Start    | 6765  | End     | 14560                |
| GI       | none  | Score   | .85                  |
| Exons    | 6765..8334, 8450..8602, 8697..8758, 9047..9295, 9645..9824, 9905..10134, 10750..10927, 11519..11624, 11979..12076, 12876..13006, 13101..13280, 13372..13636, 13750..13820, 13900..14115, 14340..14460, 14555..14560 |         |                      |



|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22313                      | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477                      | Strand  | -                    |
| Start    | 6765                       | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o5.tm | Method  | TBLASTX:Maize        |
| Start    | 6906                       | End     | 7128                 |
| GI       | none                       | Score   | 217                  |
| Exons    | 6906..7127, 6952..7128     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22313  | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477  | Strand  | -                    |
| Start    | 6765   | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 6909   | End     | 8087                 |
| GI       | none   | Score   | 440                  |
| Exons    | 6909..7526, 6952..7365, 6975..7520, 7384..7524, 7527..7718, 7540..7863, 7548..8087, 7712..7996, 7773..8087 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22313   | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477   | Strand  | -                    |
| Start    | 6765  | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o1.tc  | Method  | TBLASTX:Cress        |
| Start    | 6981  | End     | 10135                |
| GI       | none  | Score   | 80                   |
| Exons    | 6981..7100, 6988..7068, 7116..8138, 7288..7443, 7582..7650, 7587..7844, 7771..7863, 7927..8139, 8154..8354, 8209..8352, 8455..8616, 8465..8602, 8699..8761, 8708..8761, 9047..9262, 9051..9263, 9135..9296, 9980..10135 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22313                              | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477                              | Strand  | -                    |
| Start    | 6765                               | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o1.tm         | Method  | TBLASTX:Maize        |
| Start    | 7129                               | End     | 7729                 |
| GI       | none                               | Score   | 706                  |
| Exons    | 7129..7683, 7131..7718, 7442..7729 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22313                      | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477                      | Strand  | -                    |
| Start    | 6765                       | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o8.tm | Method  | TBLASTX:Maize        |
| Start    | 7761                       | End     | 8012                 |
| GI       | none                       | Score   | 193                  |
| Exons    | 7761..8012                 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22313  | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477  | Strand  | -                    |
| Start    | 6765   | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 8014   | End     | 8743                 |
| GI       | none   | Score   | 384                  |
| Exons    | 8014..8361, 8014..8358, 8016..8360, 8054..8374, 8175..8372, 8449..8607, 8450..8602, 8452..8604, 8689..8742, 8696..8743 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22313                      | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477                      | Strand  | -                    |
| Start    | 6765                       | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o4.ts | Method  | TBLASTX:Soybean      |

|       |  |       |      |
|-------|--|-------|------|
| Start | 8334   | End   | 9131 |
| GI    | none   | Score | 184  |
| Exons | 8334..8357, 8438..8644, 8450..8599, 8452..8607, 8696..8761, 9047..9130, 9047..9130, 9048..9131 |       |      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22313                      | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477                      | Strand  | -                    |
| Start    | 6765                       | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o7.tm | Method  | TBLASTX:Maize        |
| Start    | 9047                       | End     | 9298                 |
| GI       | none                       | Score   | 301                  |
| Exons    | 9047..9298, 9047..9262     |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22313   | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477   | Strand  | -                    |
| Start    | 6765  | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o2.ts  | Method  | TBLASTX:Soybean      |
| Start    | 9137  | End     | 10067                |
| GI       | none  | Score   | 59                   |
| Exons    | 9137..9259, 9145..9231, 9171..9260, 9256..9297, 9642..9740, 9643..9753, 9744..9827, 9745..9822, 9899..10063, 9899..10066, 9900..10067 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22313  | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477  | Strand  | -                    |
| Start    | 6765   | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 9637   | End     | 9979                 |
| GI       | none   | Score   | 100                  |
| Exons    | 9637..9753, 9642..9740, 9744..9827, 9745..9822, 9899..9979, 9900..9977 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22313  | Seq. ID | OJ990415_01.9922.C13 |
| Gene No. | 46477  | Strand  | -                    |
| Start    | 6765   | End     | 14560                |
| Name     | OJ990415_01.9922.C13.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 9647   | End     | 12040                |
| GI       | none   | Score   | 61                   |
| Exons    | 9647..9700, 9648..9827, 9649..9825, 9649..9828, 9899..10021, 9900..10022, 9955..10134, 9990..10133, 10016..10150, 10019..10135, 10741..10926, 10745..10927, 10750..10932, 10752..10931, 11519..11623, 11520..11624, 11521..11625, 11968..12033, 11975..12040 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22314  | Seq. ID | OJ990415_01.9922.C15 |
| Gene No. | 46478  | Strand  | +                    |
| Start    | 379  | End     | 7184                 |
| Name     | OJ990415_01.9922.C15.o1.gs                               | Method  | GENSCAN              |
| Start    | 379  | End     | 5039                 |
| GI       | none   | Score   | .46                  |
| Exons    | 379..441, 1197..1266, 2790..3315, 4087..4148, 4742..5039 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22314                      | Seq. ID | OJ990415_01.9922.C15 |
| Gene No. | 46478                      | Strand  | +                    |
| Start    | 379                        | End     | 7184                 |
| Name     | OJ990415_01.9922.C15.o1.np | Method  | AAT/NAP              |
| Start    | 2999                       | End     | 6762                 |

GI 3150408 Score 203  
 Exons 2999..3315, 5939..6171, 6558..6762  
 GI Descrip. (AC004165) hypothetical protein [Arabidopsis thaliana]

Seq. No. 22314 Seq. ID OJ990415\_01.9922.C15  
 Gene No. 46478 Strand +  
 Start 379 End 7184  
 Name OJ990415\_01.9922.C15.o2.gs Method GENSCAN  
 Start 5960 End 7184  
 GI none Score .85  
 Exons 5960..6171, 6558..6712, 6925..7001, 7077..7184

Seq. No. 22314 Seq. ID OJ990415\_01.9922.C15  
 Gene No. 46479 Strand -  
 Start 7407 End 12142  
 Name OJ990415\_01.9922.C15.o1.tw Method TBLASTX:Wheat  
 Start 3130 End 3318  
 GI none Score 254  
 Exons 3130..3315, 3136..3318

Seq. No. 22314 Seq. ID OJ990415\_01.9922.C15  
 Gene No. 46479 Strand -  
 Start 7407 End 12142  
 Name OJ990415\_01.9922.C15.o2.tm Method TBLASTX:Maize  
 Start 5788 End 6115  
 GI none Score 40  
 Exons 5788..5841, 5891..5965, 5910..5963, 5914..5964, 5968..6096, 5969..6115, 5969..6115

Seq. No. 22314 Seq. ID OJ990415\_01.9922.C15  
 Gene No. 46479 Strand -  
 Start 7407 End 12142  
 Name OJ990415\_01.9922.C15.o3.gs Method GENSCAN  
 Start 7407 End 12087  
 GI none Score .92  
 Exons 7407..7589, 8686..8760, 8842..8931, 9011..9073, 9164..9361, 9478..9579, 10781..10929, 11641..11710, 11965..12087

Seq. No. 22314 Seq. ID OJ990415\_01.9922.C15  
 Gene No. 46479 Strand -  
 Start 7407 End 12142  
 Name OJ990415\_01.9922.C15.o1.gp Method AAT/GAP  
 Start 7892 End 8784  
 GI 75834\_1.R1084 Score 939  
 Exons 7892..8309, 8686..8784  
 GI Descrip. '5816992/emb|CAB53647.1| 9.0e-18 (AL110123) putative protein [Arabidopsis thaliana]'

Seq. No. 22314 Seq. ID OJ990415\_01.9922.C15  
 Gene No. 46479 Strand -  
 Start 7407 End 12142  
 Name OJ990415\_01.9922.C15.o1.tm Method TBLASTX:Maize  
 Start 8184 End 12090  
 GI none Score 111  
 Exons 8184..8309, 8192..8311, 8193..8312, 8194..8313, 8680..8775, 8688..8762, 8705..8773, 8831..8932, 8839..8931, 8840..8932, 8841..8933, 8877..8954, 9008..9070, 9008..9070, 9024..9074,

9162..9356, 9163..9336, 9167..9361, 9167..9367, 9250..9372,  
9477..9584, 9478..9621, 9478..9582, 9479..9583, 10776..10853,  
10780..10929, 10781..10930, 10781..10930, 11630..11713,  
11631..11711, 11638..11715, 11950..12090, 11965..12090

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22314   | Seq. ID | OJ990415_01.9922.C15 |
| Gene No.    | 46479   | Strand  | -                    |
| Start       | 7407  | End     | 12142                |
| Name        | OJ990415_01.9922.C15.o2.np  | Method  | AAT/NAP              |
| Start       | 8193  | End     | 12142                |
| GI          | 5816992   | Score   | 750                  |
| Exons       | 8193..8309, 8686..8760, 8842..8931, 9164..9361, 9478..9579,<br>10781..10929, 11641..11710, 11965..12142 |         |                      |
| GI Descrip. | (AL110123) putative protein [Arabidopsis thaliana]  |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22314   | Seq. ID | OJ990415_01.9922.C15 |
| Gene No. | 46479   | Strand  | -                    |
| Start    | 7407  | End     | 12142                |
| Name     | OJ990415_01.9922.C15.o1.tc  | Method  | TBLASTX:Cress        |
| Start    | 8220  | End     | 9344                 |
| GI       | none  | Score   | 87                   |
| Exons    | 8220..8309, 8221..8298, 8680..8778, 8837..8932, 8839..8931,<br>9008..9085, 9161..9334, 9164..9331, 9198..9344 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22314   | Seq. ID | OJ990415_01.9922.C15 |
| Gene No.    | 46479   | Strand  | -                    |
| Start       | 7407  | End     | 12142                |
| Name        | OJ990415_01.9922.C15.o2.gp  | Method  | AAT/GAP              |
| Start       | 9331  | End     | 10944                |
| GI          | 4968800   | Score   | 460                  |
| Exons       | 9331..9361, 9478..9579, 10781..10944  |         |                      |
| GI Descrip. | 5816992/emb CAB53647.1  4.0e-24 (AL110123) putative protein<br>[Arabidopsis thaliana] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22314   | Seq. ID | OJ990415_01.9922.C15 |
| Gene No. | 46479   | Strand  | -                    |
| Start    | 7407  | End     | 12142                |
| Name     | OJ990415_01.9922.C15.o2.tw  | Method  | TBLASTX:Wheat        |
| Start    | 10793   | End     | 12090                |
| GI       | none  | Score   | 99                   |
| Exons    | 10793..10930, 10795..10929, 10796..10930, 11630..11713,<br>11631..11711, 11638..11712, 11950..12090, 11965..12090 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22315                      | Seq. ID | OJ990415_01.9922.C16 |
| Gene No. | 46480                      | Strand  | +                    |
| Start    | 136                        | End     | 3032                 |
| Name     | OJ990415_01.9922.C16.o1.gs | Method  | GENSCAN              |
| Start    | 136                        | End     | 3032                 |
| GI       | none                       | Score   | .4                   |
| Exons    | 136..402, 2834..3032       |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22316                      | Seq. ID | OJ990415_01.9922.C17 |
| Gene No. | 46481                      | Strand  | -                    |
| Start    | 783                        | End     | 1960                 |
| Name     | OJ990415_01.9922.C17.o1.gs | Method  | GENSCAN              |
| Start    | 783                        | End     | 1960                 |
| GI       | none                       | Score   | .41                  |

Exons 783..888, 1798..1960

Seq. No. 22317 Seq. ID OJ990415\_01.9922.C18  
Gene No. 46482 Strand +  
Start 2166 End 11508  
Name OJ990415\_01.9922.C18.o1.np Method AAT/NAP  
Start 2166 End 9902  
GI 2654606 Score 153  
Exons 2166..2287, 7908..7995, 8061..8161, 8244..8333, 8445..8588,  
9527..9713, 9835..9902  
GI Descrip. (AF011387) putative mitotic checkpoint protein kinase [Homo  
sapiens]

Seq. No. 22317 Seq. ID OJ990415\_01.9922.C18  
Gene No. 46482 Strand +  
Start 2166 End 11508  
Name OJ990415\_01.9922.C18.o1.gs Method GENSCAN  
Start 2426 End 11508  
GI none Score .85  
Exons 2426..2608, 2872..3139, 4585..4828, 5631..5790, 5878..6035,  
6146..6239, 7413..7523, 7603..7690, 7909..8012, 8090..8161,  
8244..8333, 8445..8602, 9432..9486, 9579..9713, 9835..9956,  
10208..10340, 10884..10985, 11338..11508

Seq. No. 22317 Seq. ID OJ990415\_01.9922.C18  
Gene No. 46482 Strand +  
Start 2166 End 11508  
Name OJ990415\_01.9922.C18.o1.gp Method AAT/GAP  
Start 8075 End 8340  
GI 3107328 Score 288  
Exons 8075..8161, 8244..8340  
GI Descrip. 4454483/gb|AAD20930| 5.0e-11 (AC006234) putative kinase, 5'  
partial [Arabidopsis thaliana]

Seq. No. 22317 Seq. ID OJ990415\_01.9922.C18  
Gene No. 46483 Strand -  
Start 12052 End 14678  
Name OJ990415\_01.9922.C18.o3.tm Method TBLASTX:Maize  
Start 4623 End 5790  
GI none Score 206  
Exons 4623..4655, 4767..4829, 5628..5789, 5629..5790

Seq. No. 22317 Seq. ID OJ990415\_01.9922.C18  
Gene No. 46483 Strand -  
Start 12052 End 14678  
Name OJ990415\_01.9922.C18.o1.tm Method TBLASTX:Maize  
Start 7416 End 8527  
GI none Score 113  
Exons 7416..7523, 7421..7519, 7583..7675, 7602..7691, 7603..7692,  
7907..8011, 7907..8011, 7908..8036, 7908..8015, 8066..8161,  
8072..8161, 8085..8165, 8232..8333, 8241..8333, 8243..8335,  
8404..8526, 8439..8522, 8444..8527

Seq. No. 22317 Seq. ID OJ990415\_01.9922.C18  
Gene No. 46483 Strand -  
Start 12052 End 14678  
Name OJ990415\_01.9922.C18.o2.tm Method TBLASTX:Maize

Start 10178  
 GI none  
 Exons 10178..10387, 10197..10385

End 10387  
 Score 242

Seq. No. 22317  
 Gene No. 46483  
 Start 12052  
 Name OJ990415\_01.9922.C18.o2.gs  
 Start 12052  
 GI none  
 Exons 12052..12321, 12708..12981, 13008..13245, 13263..13321, 13496..13649, 14597..14678

Seq. ID OJ990415\_01.9922.C18  
 Strand -  
 End 14678  
 Method GENSCAN  
 End 14678  
 Score .73

Seq. No. 22318  
 Gene No. 46484  
 Start 3906  
 Name OJ990415\_01.9922.C19.o1.gs  
 Start 3906  
 GI none  
 Exons 3906..3961, 4027..4132

Seq. ID OJ990415\_01.9922.C19  
 Strand +  
 End 4132  
 Method GENSCAN  
 End 4132  
 Score .45

Seq. No. 22318  
 Gene No. 46485  
 Start 5540  
 Name OJ990415\_01.9922.C19.o2.gs  
 Start 5540  
 GI none  
 Exons 5540..5678, 6715..6833

Seq. ID OJ990415\_01.9922.C19  
 Strand +  
 End 6833  
 Method GENSCAN  
 End 6833  
 Score .77

Seq. No. 22318  
 Gene No. 46486  
 Start 7639  
 Name OJ990415\_01.9922.C19.o3.gs  
 Start 7639  
 GI none  
 Exons 7639..7861

Seq. ID OJ990415\_01.9922.C19  
 Strand -  
 End 7861  
 Method GENSCAN  
 End 7861  
 Score .56

Seq. No. 22319  
 Gene No. 46487  
 Start 5  
 Name OJ990415\_01.9922.C21.o1.gs  
 Start 5  
 GI none  
 Exons 5..85, 789..848

Seq. ID OJ990415\_01.9922.C21  
 Strand +  
 End 848  
 Method GENSCAN  
 End 848  
 Score .87

Seq. No. 22319  
 Gene No. 46488  
 Start 9409  
 Name OJ990415\_01.9922.C21.o1.np  
 Start 9409  
 GI 4996642  
 Exons 9409..9538, 15235..15494, 16065..16222, 19498..19571  
 GI Descrip. (AB028130) Dof zinc finger protein [Oryza sativa]

Seq. ID OJ990415\_01.9922.C21  
 Strand +  
 End 19571  
 Method AAT/NAP  
 End 19571  
 Score 271

Seq. No. 22319  
 Gene No. 46488  
 Start 9409

Seq. ID OJ990415\_01.9922.C21  
 Strand +  
 End 19571

Name OJ990415\_01.9922.C21.o4.gs  
 Start 15180  
 GI none  
 Exons 15180..16259

Method GENSCAN  
 End 16259  
 Score .99

Seq. No. 22319  
 Gene No. 46488  
 Start 9409  
 Name OJ990415\_01.9922.C21.o2.gp  
 Start 16131  
 GI none  
 Exons 16131..16432

Seq. ID OJ990415\_01.9922.C21  
 Strand +  
 End 19571  
 Method AAT/GAP  
 End 16432  
 Score 510

Seq. No. 22319  
 Gene No. 46489  
 Start 1507  
 Name OJ990415\_01.9922.C21.o2.gs  
 Start 1507  
 GI none  
 Exons 1507..1708, 1768..1835

Seq. ID OJ990415\_01.9922.C21  
 Strand -  
 End 1835  
 Method GENSCAN  
 End 1835  
 Score .83

Seq. No. 22319  
 Gene No. 46490  
 Start 15358  
 Name OJ990415\_01.9922.C21.o1.gp  
 Start 15358  
 GI uC-osroM202007g08a1  
 Exons 15358..15761

Seq. ID OJ990415\_01.9922.C21  
 Strand -  
 End 15761  
 Method AAT/GAP  
 End 15761  
 Score 776

GI Descrip. '3927829 2.0e-18 (AC005727) putative zinc finger protein [Arabidopsis thaliana]'

Seq. No. 22319  
 Gene No. 46491  
 Start 16586  
 Name OJ990415\_01.9922.C21.o1.tc  
 Start 15303  
 GI none  
 Exons 15303..15485, 15329..15493

Seq. ID OJ990415\_01.9922.C21  
 Strand -  
 End 19112  
 Method TBLASTX;Cress  
 End 15493  
 Score 296

Seq. No. 22319  
 Gene No. 46491  
 Start 16586  
 Name OJ990415\_01.9922.C21.o1.tm  
 Start 15306  
 GI none  
 Exons 15306..15485, 15323..15490

Seq. ID OJ990415\_01.9922.C21  
 Strand -  
 End 19112  
 Method TBLASTX;Maize  
 End 15490  
 Score 338

Seq. No. 22319  
 Gene No. 46491  
 Start 16586  
 Name OJ990415\_01.9922.C21.o1.ts  
 Start 15318  
 GI none  
 Exons 15318..15485, 15329..15487

Seq. ID OJ990415\_01.9922.C21  
 Strand -  
 End 19112  
 Method TBLASTX;Soybean  
 End 15487  
 Score 303

Seq. No. 22319  
 Gene No. 46491

Seq. ID OJ990415\_01.9922.C21  
 Strand -

|       |  |        |         |
|-------|--|--------|---------|
| Start | 16586                                    | End    | 19112   |
| Name  | OJ990415_01.9922.C21.o5.gs               | Method | GENSCAN |
| Start | 16586                                    | End    | 19112   |
| GI    | none                                     | Score  | .56     |
| Exons | 16586..16672, 17802..17865, 19090..19112 |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22319                      | Seq. ID | OJ990415_01.9922.C21 |
| Gene No. | 46491                      | Strand  | -                    |
| Start    | 16586                      | End     | 19112                |
| Name     | OJ990415_01.9922.C21.o3.gp | Method  | AAT/GAP              |
| Start    | 16811                      | End     | 17324                |
| GI       | none                       | Score   | 1004                 |
| Exons    | 16811..17324               |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22320                      | Seq. ID | OJ990415_01.9922.C22 |
| Gene No. | 46492                      | Strand  | -                    |
| Start    | 2063                       | End     | 2396                 |
| Name     | OJ990415_01.9922.C22.o1.gs | Method  | GENSCAN              |
| Start    | 2063                       | End     | 2396                 |
| GI       | none                       | Score   | .77                  |
| Exons    | 2063..2396                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22321                      | Seq. ID | OJ990415_01.9922.C23 |
| Gene No. | 46493                      | Strand  | +                    |
| Start    | 261                        | End     | 512                  |
| Name     | OJ990415_01.9922.C23.o1.gs | Method  | GENSCAN              |
| Start    | 261                        | End     | 512                  |
| GI       | none                       | Score   | .42                  |
| Exons    | 261..512                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22322                      | Seq. ID | OJ990415_01.9922.C24 |
| Gene No. | 46494                      | Strand  | +                    |
| Start    | 997                        | End     | 1294                 |
| Name     | OJ990415_01.9922.C24.o1.gs | Method  | GENSCAN              |
| Start    | 997                        | End     | 1294                 |
| GI       | none                       | Score   | .94                  |
| Exons    | 997..1121, 1165..1294      |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22322                      | Seq. ID | OJ990415_01.9922.C24 |
| Gene No. | 46495                      | Strand  | +                    |
| Start    | 3331                       | End     | 3584                 |
| Name     | OJ990415_01.9922.C24.o2.gs | Method  | GENSCAN              |
| Start    | 3331                       | End     | 3584                 |
| GI       | none                       | Score   | .48                  |
| Exons    | 3331..3333, 3465..3584     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22323                      | Seq. ID | OJ990415_01.9922.C25 |
| Gene No. | 46496                      | Strand  | +                    |
| Start    | 118                        | End     | 371                  |
| Name     | OJ990415_01.9922.C25.o1.gs | Method  | GENSCAN              |
| Start    | 118                        | End     | 371                  |
| GI       | none                       | Score   | .68                  |
| Exons    | 118..120, 252..371         |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22324 | Seq. ID | OJ990415_01.9922.C26 |
| Gene No. | 46497 | Strand  | +                    |
| Start    | 742   | End     | 2179                 |



|       |                                  |        |         |
|-------|----------------------------------|--------|---------|
| Name  | OJ990415_01.9922.C26.o1.gs       | Method | GENSCAN |
| Start | 742                              | End    | 2179    |
| GI    | none                             | Score  | .5      |
| Exons | 742..811, 1552..1635, 2019..2179 |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22325  | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498  | Strand  | -                    |
| Start    | 242  | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o1.gs   | Method  | GENSCAN              |
| Start    | 242  | End     | 7282                 |
| GI       | none   | Score   | .58                  |
| Exons    | 242..770, 1825..1917, 1919..2207, 2615..2869, 4596..4844, 4948..5176, 6968..7282 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22325                        | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498                        | Strand  | -                    |
| Start    | 242                          | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o3.tc   | Method  | TBLASTX:Cress        |
| Start    | 242                          | End     | 466                  |
| GI       | none                         | Score   | 84                   |
| Exons    | 242..457, 242..466, 348..461 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22325                        | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498                        | Strand  | -                    |
| Start    | 242                          | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 242                          | End     | 436                  |
| GI       | none                         | Score   | 97                   |
| Exons    | 242..436, 245..412, 348..434 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22325                        | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498                        | Strand  | -                    |
| Start    | 242                          | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 242                          | End     | 478                  |
| GI       | none                         | Score   | 50                   |
| Exons    | 242..478, 246..308, 348..467 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22325  | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498  | Strand  | -                    |
| Start    | 242  | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o1.np   | Method  | AAT/NAP              |
| Start    | 245  | End     | 5176                 |
| GI       | 3859659  | Score   | 2307                 |
| Exons    | 245..770, 1825..2348, 2615..2874, 3011..3114, 3190..3242, 4018..4278, 4566..4844, 4948..5176 |         |                      |

GI Descrip. (AL031394) putative potassium transporter AtKT5p (AtKT5)  
[Arabidopsis thaliana]

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22325   | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498   | Strand  | -                    |
| Start    | 242   | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 525   | End     | 2711                 |
| GI       | none  | Score   | 48                   |
| Exons    | 525..641, 560..601, 624..788, 638..772, 1821..1886, 1822..1881, 1881..2294, 1883..2350, 1885..2265, 1904..2347, 2578..2703, |         |                      |

2607..2711, 2611..2709, 2613..2711

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22325  | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498  | Strand  | -                    |
| Start    | 242  | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 656  | End     | 2284                 |
| GI       | none   | Score   | 84                   |
| Exons    | 656..772, 657..788, 1816..1881, 1821..1886, 1873..2283, 1883..2284, 1885..2262, 1886..2275 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22325  | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498  | Strand  | -                    |
| Start    | 242  | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o1.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 1863   | End     | 2293                 |
| GI       | none   | Score   | 303                  |
| Exons    | 1863..1886, 1883..2293, 1884..2036, 1885..2259, 1892..2284 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22325  | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498  | Strand  | -                    |
| Start    | 242  | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o2.tm                     | Method  | TBLASTX:Maize        |
| Start    | 2285   | End     | 2852                 |
| GI       | none   | Score   | 99                   |
| Exons    | 2285..2347, 2287..2349, 2566..2847, 2613..2852 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22325  | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498  | Strand  | -                    |
| Start    | 242  | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o4.tc   | Method  | TBLASTX:Cress        |
| Start    | 2646   | End     | 4172                 |
| GI       | none   | Score   | 166                  |
| Exons    | 2646..2876, 2656..2862, 2974..3063, 2999..3115, 3206..3259, 4016..4171, 4017..4172 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22325                              | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498                              | Strand  | -                    |
| Start    | 242                                | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o5.ts         | Method  | TBLASTX:Soybean      |
| Start    | 2712                               | End     | 3063                 |
| GI       | none                               | Score   | 169                  |
| Exons    | 2712..2876, 2713..2865, 2986..3063 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22325                              | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498                              | Strand  | -                    |
| Start    | 242                                | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o4.ts         | Method  | TBLASTX:Soybean      |
| Start    | 4016                               | End     | 4737                 |
| GI       | none                               | Score   | 182                  |
| Exons    | 4016..4273, 4017..4277, 4597..4737 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22325                      | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498                      | Strand  | -                    |
| Start    | 242                        | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o3.tm | Method  | TBLASTX:Maize        |
| Start    | 4169                       | End     | 5146                 |

|       |  |       |    |
|-------|--|-------|----|
| GI    | none   | Score | 81 |
| Exons | 4169..4273, 4598..4711, 4598..4675, 4750..4845, 4780..4839, 4946..5098, 5075..5146 |       |    |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22325  | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498  | Strand  | -                    |
| Start    | 242  | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o2.tc                     | Method  | TBLASTX:Cress        |
| Start    | 4801   | End     | 7069                 |
| GI       | none   | Score   | 124                  |
| Exons    | 4801..4842, 4949..5182, 4968..5108, 6971..7069 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22325                              | Seq. ID | OJ990415_01.9922.C27 |
| Gene No. | 46498                              | Strand  | -                    |
| Start    | 242                                | End     | 7282                 |
| Name     | OJ990415_01.9922.C27.o3.ts         | Method  | TBLASTX:Soybean      |
| Start    | 4976                               | End     | 5182                 |
| GI       | none                               | Score   | 141                  |
| Exons    | 4976..5182, 4980..5177, 5059..5178 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22326   | Seq. ID | OJ990415_01.9922.C28 |
| Gene No.    | 46499   | Strand  | +                    |
| Start       | 633   | End     | 2373                 |
| Name        | OJ990415_01.9922.C28.o1.np  | Method  | AAT/NAP              |
| Start       | 633   | End     | 2373                 |
| GI          | 4539658   | Score   | 84                   |
| Exons       | 633..690, 1970..2112, 2281..2373                                  |         |                      |
| GI Descrip. | (AF061282) serine carboxypeptidase-like protein [Sorghum bicolor] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22326   | Seq. ID | OJ990415_01.9922.C28 |
| Gene No.    | 46499   | Strand  | +                    |
| Start       | 633   | End     | 2373                 |
| Name        | OJ990415_01.9922.C28.o2.np  | Method  | AAT/NAP              |
| Start       | 1969  | End     | 2373                 |
| GI          | 4539658   | Score   | 83                   |
| Exons       | 1969..2112, 2281..2373  |         |                      |
| GI Descrip. | (AF061282) serine carboxypeptidase-like protein [Sorghum bicolor] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22326                      | Seq. ID | OJ990415_01.9922.C28 |
| Gene No. | 46500                      | Strand  | -                    |
| Start    | 1889                       | End     | 2176                 |
| Name     | OJ990415_01.9922.C28.o2.gs | Method  | GENSCAN              |
| Start    | 1889                       | End     | 2176                 |
| GI       | none                       | Score   | .47                  |
| Exons    | 1889..2176                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22327                      | Seq. ID | OJ990415_01.9922.C29 |
| Gene No. | 46501                      | Strand  | +                    |
| Start    | 1997                       | End     | 4504                 |
| Name     | OJ990415_01.9922.C29.o1.gs | Method  | GENSCAN              |
| Start    | 1997                       | End     | 4504                 |
| GI       | none                       | Score   | .65                  |
| Exons    | 1997..2113, 4304..4504     |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22328 | Seq. ID | OJ990415_01.9922.C30 |
|----------|-------|---------|----------------------|

Gene No. 46502  
 Start 457  
 Name OJ990415\_01.9922.C30.ol.gs  
 Start 457  
 GI none  
 Exons 457..530, 732..745

Strand +  
 End 745  
 Method GENSCAN  
 End 745  
 Score .75

Seq. No. 22329  
 Gene No. 46503  
 Start 314  
 Name OJ990415\_01.9922.C31.ol.gs  
 Start 314  
 GI none  
 Exons 314..691, 1179..1277

Seq. ID OJ990415\_01.9922.C31  
 Strand +  
 End 1277  
 Method GENSCAN  
 End 1277  
 Score .52

Seq. No. 22330  
 Gene No. 46504  
 Start 411  
 Name OJ990415\_01.9922.C32.ol.tm  
 Start 402  
 GI none  
 Exons 402..587, 406..588, 411..593, 413..592

Seq. ID OJ990415\_01.9922.C32  
 Strand -  
 End 593  
 Method TBLASTX:Maize  
 End 593  
 Score 230

Seq. No. 22330  
 Gene No. 46504  
 Start 411  
 Name OJ990415\_01.9922.C32.ol.gs  
 Start 411  
 GI none  
 Exons 411..588

Seq. ID OJ990415\_01.9922.C32  
 Strand -  
 End 593  
 Method GENSCAN  
 End 588  
 Score .77

Seq. No. 22331  
 Gene No. 46505  
 Start 374  
 Name OJ990415\_01.9922.C33.ol.gs  
 Start 374  
 GI none  
 Exons 374..496

Seq. ID OJ990415\_01.9922.C33  
 Strand +  
 End 496  
 Method GENSCAN  
 End 496  
 Score .58

Seq. No. 22332  
 Gene No. 46506  
 Start 550  
 Name OJ990415\_01.9922.C34.ol.gp  
 Start 550  
 GI none  
 Exons 550..760

Seq. ID OJ990415\_01.9922.C34  
 Strand +  
 End 760  
 Method AAT/GAP  
 End 760  
 Score 339

Seq. No. 22333  
 Gene No. 46507  
 Start 190  
 Name OJ990415\_01.9922.C35.ol.gs  
 Start 190  
 GI none  
 Exons 190..330, 357..477, 560..634

Seq. ID OJ990415\_01.9922.C35  
 Strand +  
 End 634  
 Method GENSCAN  
 End 634  
 Score .84

Seq. No. 22334  
 Gene No. 46508

Seq. ID OJ990415\_01.9922.C36  
 Strand +

Start 271  
 Name OJ990415\_01.9922.C36.o1.gs  
 Start 271  
 GI none  
 Exons 271..375

End 375  
 Method GENSCAN  
 End 375  
 Score .51

Seq. No. 22335  
 Gene No. 46509  
 Start 1  
 Name OJ990415\_01.9922.C37.o1.np  
 Start 1  
 GI 3859659  
 Exons 1..416, 661..722

Seq. ID OJ990415\_01.9922.C37  
 Strand -  
 End 722  
 Method AAT/NAP  
 End 722  
 Score 265

GI Descrip. (AL031394) putative potassium transporter AtKT5p (AtKT5)  
 [Arabidopsis thaliana]

Seq. No. 22335  
 Gene No. 46509  
 Start 1  
 Name OJ990415\_01.9922.C37.o1.tc  
 Start 157  
 GI none  
 Exons 157..414, 158..361

Seq. ID OJ990415\_01.9922.C37  
 Strand -  
 End 722  
 Method TBLASTX:Cress  
 End 414  
 Score 63

Seq. No. 22335  
 Gene No. 46509  
 Start 1  
 Name OJ990415\_01.9922.C37.o1.tm  
 Start 157  
 GI none  
 Exons 157..360, 158..352

Seq. ID OJ990415\_01.9922.C37  
 Strand -  
 End 722  
 Method TBLASTX:Maize  
 End 360  
 Score 125

Seq. No. 22335  
 Gene No. 46509  
 Start 1  
 Name OJ990415\_01.9922.C37.o1.ts  
 Start 157  
 GI none  
 Exons 157..414, 158..418

Seq. ID OJ990415\_01.9922.C37  
 Strand -  
 End 722  
 Method TBLASTX:Soybean  
 End 418  
 Score 182

Seq. No. 22336  
 Gene No. 46510  
 Start 54  
 Name OJ990415\_01.9922.C38.o1.gs  
 Start 54  
 GI none  
 Exons 54..70

Seq. ID OJ990415\_01.9922.C38  
 Strand +  
 End 70  
 Method GENSCAN  
 End 70  
 Score .6

Seq. No. 22337  
 Gene No. 46511  
 Start 245  
 Name OJ990415\_03.9922.C1.o1.gs  
 Start 245  
 GI none  
 Exons 245..456

Seq. ID OJ990415\_03.9922.C1  
 Strand -  
 End 456  
 Method GENSCAN  
 End 456  
 Score .97

Seq. No. 22337

Seq. ID OJ990415\_03.9922.C1

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 46511  | Strand | -       |
| Start       | 245  | End    | 456     |
| Name        | OJ990415_03.9922.C1.ol.np                      | Method | AAT/NAP |
| Start       | 248  | End    | 456     |
| GI          | 6721508  | Score  | 331     |
| Exons       | 248..456                                       |        |         |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa] |        |         |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22338                     | Seq. ID | OJ990415_03.9922.C2 |
| Gene No. | 46512                     | Strand  | +                   |
| Start    | 539                       | End     | 841                 |
| Name     | OJ990415_03.9922.C2.ol.gs | Method  | GENSCAN             |
| Start    | 539                       | End     | 841                 |
| GI       | none                      | Score   | .75                 |
| Exons    | 539..574, 699..841        |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22339                     | Seq. ID | OJ990415_03.9922.C4 |
| Gene No. | 46513                     | Strand  | +                   |
| Start    | 350                       | End     | 442                 |
| Name     | OJ990415_03.9922.C4.ol.gs | Method  | GENSCAN             |
| Start    | 350                       | End     | 442                 |
| GI       | none                      | Score   | .66                 |
| Exons    | 350..442                  |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22340                     | Seq. ID | OJ990415_03.9922.C6 |
| Gene No. | 46514                     | Strand  | +                   |
| Start    | 98                        | End     | 561                 |
| Name     | OJ990415_03.9922.C6.ol.gs | Method  | GENSCAN             |
| Start    | 98                        | End     | 561                 |
| GI       | none                      | Score   | .74                 |
| Exons    | 98..561                   |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22340  | Seq. ID | OJ990415_03.9922.C6 |
| Gene No.    | 46515  | Strand  | -                   |
| Start       | 1  | End     | 675                 |
| Name        | OJ990415_03.9922.C6.ol.np                      | Method  | AAT/NAP             |
| Start       | 1  | End     | 675                 |
| GI          | 6721505  | Score   | 847                 |
| Exons       | 1..270, 435..675                               |         |                     |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22341                     | Seq. ID | OJ990415_03.9922.C7 |
| Gene No. | 46516                     | Strand  | +                   |
| Start    | 214                       | End     | 488                 |
| Name     | OJ990415_03.9922.C7.ol.gs | Method  | GENSCAN             |
| Start    | 214                       | End     | 488                 |
| GI       | none                      | Score   | .83                 |
| Exons    | 214..283, 387..488        |         |                     |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22342  | Seq. ID | OJ990415_03.9922.C11 |
| Gene No.    | 46517  | Strand  | +                    |
| Start       | 409  | End     | 498                  |
| Name        | OJ990415_03.9922.C11.ol.gp                                   | Method  | AAT/GAP              |
| Start       | 409  | End     | 498                  |
| GI          | 25552_1.R1084  | Score   | 162                  |
| Exons       | 409..498   |         |                      |
| GI Descrip. | '2104691 4.0e-19 (U92794) alpha glucosidase II, beta subunit |         |                      |

[Mus musculus]'

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22342   | Seq. ID | OJ990415_03.9922.C11 |
| Gene No.    | 46518   | Strand  | -                    |
| Start       | 385   | End     | 498                  |
| Name        | OJ990415_03.9922.C11.o1.np  | Method  | AAT/NAP              |
| Start       | 385   | End     | 498                  |
| GI          | 6539569   | Score   | 193                  |
| Exons       | 385..498  |         |                      |
| GI Descrip. | (AP000836) EST C19724(E10840) corresponds to a region of the predicted gene.; Similar to protein kinase C substrate (P14314) [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22343  | Seq. ID | OJ990415_03.9922.C13 |
| Gene No.    | 46519  | Strand  | -                    |
| Start       | 1  | End     | 698                  |
| Name        | OJ990415_03.9922.C13.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 571                  |
| GI          | 6539570  | Score   | 309                  |
| Exons       | 1..21, 152..218, 378..571                      |         |                      |
| GI Descrip. | (AP000836) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22343                      | Seq. ID | OJ990415_03.9922.C13 |
| Gene No. | 46519                      | Strand  | -                    |
| Start    | 1                          | End     | 698                  |
| Name     | OJ990415_03.9922.C13.o1.gs | Method  | GENSCAN              |
| Start    | 348                        | End     | 698                  |
| GI       | none                       | Score   | .85                  |
| Exons    | 348..538, 653..698         |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22343   | Seq. ID | OJ990415_03.9922.C13 |
| Gene No.    | 46520   | Strand  | -                    |
| Start       | 707   | End     | 1442                 |
| Name        | OJ990415_03.9922.C13.o2.np  | Method  | AAT/NAP              |
| Start       | 707   | End     | 1442                 |
| GI          | 6630699   | Score   | 88                   |
| Exons       | 707..784, 1422..1442  |         |                      |
| GI Descrip. | (AP000969) hypothetical protein [Oryza sativa]<br>gi 6721536 dbj BAA89566.1  (AP001073) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22344                      | Seq. ID | OJ990415_03.9922.C14 |
| Gene No. | 46521                      | Strand  | +                    |
| Start    | 234                        | End     | 375                  |
| Name     | OJ990415_03.9922.C14.o1.gs | Method  | GENSCAN              |
| Start    | 234                        | End     | 375                  |
| GI       | none                       | Score   | .92                  |
| Exons    | 234..375                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22344  | Seq. ID | OJ990415_03.9922.C14 |
| Gene No.    | 46522  | Strand  | -                    |
| Start       | 243  | End     | 381                  |
| Name        | OJ990415_03.9922.C14.o1.np                     | Method  | AAT/NAP              |
| Start       | 243  | End     | 381                  |
| GI          | 6539572  | Score   | 173                  |
| Exons       | 243..381                                       |         |                      |
| GI Descrip. | (AP000836) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22345                      | Seq. ID | OJ990415_03.9922.C15 |
| Gene No. | 46523                      | Strand  | +                    |
| Start    | 155                        | End     | 457                  |
| Name     | OJ990415_03.9922.C15.o1.gs | Method  | GENSCAN              |
| Start    | 155                        | End     | 457                  |
| GI       | none                       | Score   | .54                  |
| Exons    | 155..457                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22345                      | Seq. ID | OJ990415_03.9922.C15 |
| Gene No. | 46524                      | Strand  | -                    |
| Start    | 832                        | End     | 1095                 |
| Name     | OJ990415_03.9922.C15.o2.gs | Method  | GENSCAN              |
| Start    | 832                        | End     | 1053                 |
| GI       | none                       | Score   | .6                   |
| Exons    | 832..1053                  |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22345                                     | Seq. ID | OJ990415_03.9922.C15 |
| Gene No. | 46524                                     | Strand  | -                    |
| Start    | 832                                       | End     | 1095                 |
| Name     | OJ990415_03.9922.C15.o1.tm                | Method  | TBLASTX:Maize        |
| Start    | 893                                       | End     | 1095                 |
| GI       | none                                      | Score   | 284                  |
| Exons    | 893..946, 896..1093, 902..1093, 904..1095 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22345                                     | Seq. ID | OJ990415_03.9922.C15 |
| Gene No. | 46524                                     | Strand  | -                    |
| Start    | 832                                       | End     | 1095                 |
| Name     | OJ990415_03.9922.C15.o1.tw                | Method  | TBLASTX:Wheat        |
| Start    | 893                                       | End     | 1095                 |
| GI       | none                                      | Score   | 260                  |
| Exons    | 893..967, 896..1093, 902..1012, 904..1095 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22345   | Seq. ID | OJ990415_03.9922.C15 |
| Gene No.    | 46524   | Strand  | -                    |
| Start       | 832   | End     | 1095                 |
| Name        | OJ990415_03.9922.C15.o1.gp  | Method  | AAT/GAP              |
| Start       | 895   | End     | 1095                 |
| GI          | 44866_1.R1084   | Score   | 365                  |
| Exons       | 895..1095   |         |                      |
| GI Descrip. | '5852170/emb AL117265.1 OST17804 2.0e-10 Oryza sativa indica(GLA4) genomic DNA, chromosome 4, BAC clone:t17804' |         |                      |

|          |                                 |         |                      |
|----------|---------------------------------|---------|----------------------|
| Seq. No. | 22345                           | Seq. ID | OJ990415_03.9922.C15 |
| Gene No. | 46524                           | Strand  | -                    |
| Start    | 832                             | End     | 1095                 |
| Name     | OJ990415_03.9922.C15.o1.tc      | Method  | TBLASTX:Cress        |
| Start    | 896                             | End     | 1095                 |
| GI       | none                            | Score   | 199                  |
| Exons    | 896..1093, 902..1009, 904..1095 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22345                      | Seq. ID | OJ990415_03.9922.C15 |
| Gene No. | 46524                      | Strand  | -                    |
| Start    | 832                        | End     | 1095                 |
| Name     | OJ990415_03.9922.C15.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 896                        | End     | 1095                 |
| GI       | none                       | Score   | 276                  |



Exons 896..1093, 904..1095

Seq. No. 22345 Seq. ID OJ990415\_03.9922.C15  
Gene No. 46524 Strand -  
Start 832 End 1095  
Name OJ990415\_03.9922.C15.o1.np Method AAT/NAP  
Start 897 End 1095  
GI 6539568 Score 303  
Exons 897..1095  
GI Descrip. (AP000836) ESTs AU081247(C50004),AU068940(C51113) correspond to  
a region of the predicted gene.; Similar to pyruvate kinase  
(Q42954) [Oryza sativa]

Seq. No. 22346 Seq. ID OJ990415\_03.9922.C17  
Gene No. 46525 Strand +  
Start 1132 End 1395  
Name OJ990415\_03.9922.C17.o1.gs Method GENSCAN  
Start 1132 End 1341  
GI none Score .93  
Exons 1132..1341

Seq. No. 22346 Seq. ID OJ990415\_03.9922.C17  
Gene No. 46525 Strand +  
Start 1132 End 1395  
Name OJ990415\_03.9922.C17.o1.np Method AAT/NAP  
Start 1132 End 1395  
GI 6523097 Score 218  
Exons 1132..1395  
GI Descrip. (AL133315) putative protein [Arabidopsis thaliana]

Seq. No. 22346 Seq. ID OJ990415\_03.9922.C17  
Gene No. 46526 Strand -  
Start 764 End 1716  
Name OJ990415\_03.9922.C17.o1.gp Method AAT/GAP  
Start 764 End 1716  
GI 2496\_1.R1084 Score 1875  
Exons 764..1716  
GI Descrip. '6091733/gb|AAF03445.1|AC010797\_21 3.0e-17 (AC010797) unknown  
protein [Arabidopsis thaliana]'

Seq. No. 22346 Seq. ID OJ990415\_03.9922.C17  
Gene No. 46527 Strand -  
Start 3626 End 4168  
Name OJ990415\_03.9922.C17.o2.gs Method GENSCAN  
Start 3626 End 4168  
GI none Score .93  
Exons 3626..4168

Seq. No. 22346 Seq. ID OJ990415\_03.9922.C17  
Gene No. 46527 Strand -  
Start 3626 End 4168  
Name OJ990415\_03.9922.C17.o2.np Method AAT/NAP  
Start 3632 End 4168  
GI 5281045 Score 327  
Exons 3632..4168  
GI Descrip. (AL080318) hypothetical protein [Arabidopsis thaliana]

Seq. No. 22346  
 Gene No. 46527  
 Start 3626  
 Name OJ990415\_03.9922.C17.o2.gp  
 Start 3758  
 GI none  
 Exons 3758..4087

Seq. ID OJ990415\_03.9922.C17  
 Strand -  
 End 4168  
 Method AAT/GAP  
 End 4087  
 Score 649

Seq. No. 22346  
 Gene No. 46528  
 Start 4516  
 Name OJ990415\_03.9922.C17.o2.tc  
 Start 1117  
 GI none  
 Exons 1117..1317, 1131..1316

Seq. ID OJ990415\_03.9922.C17  
 Strand -  
 End 7296  
 Method TBLASTX:Cress  
 End 1317  
 Score 205

Seq. No. 22346  
 Gene No. 46528  
 Start 4516  
 Name OJ990415\_03.9922.C17.o3.tm  
 Start 1117  
 GI none  
 Exons 1117..1302, 1131..1316

Seq. ID OJ990415\_03.9922.C17  
 Strand -  
 End 7296  
 Method TBLASTX:Maize  
 End 1316  
 Score 262

Seq. No. 22346  
 Gene No. 46528  
 Start 4516  
 Name OJ990415\_03.9922.C17.o1.ts  
 Start 1131  
 GI none  
 Exons 1131..1349, 1132..1335

Seq. ID OJ990415\_03.9922.C17  
 Strand -  
 End 7296  
 Method TBLASTX:Soybean  
 End 1349  
 Score 269

Seq. No. 22346  
 Gene No. 46528  
 Start 4516  
 Name OJ990415\_03.9922.C17.o1.tw  
 Start 1131  
 GI none  
 Exons 1131..1328, 1132..1329

Seq. ID OJ990415\_03.9922.C17  
 Strand -  
 End 7296  
 Method TBLASTX:Wheat  
 End 1329  
 Score 242

Seq. No. 22346  
 Gene No. 46528  
 Start 4516  
 Name OJ990415\_03.9922.C17.o1.tm  
 Start 3577  
 GI none  
 Exons 3577..3630, 3627..3920, 3628..3915, 3659..3919, 3862..3999, 3977..4057, 3985..4173, 4079..4180, 4106..4177

Seq. ID OJ990415\_03.9922.C17  
 Strand -  
 End 7296  
 Method TBLASTX:Maize  
 End 4180  
 Score 48

Seq. No. 22346  
 Gene No. 46528  
 Start 4516  
 Name OJ990415\_03.9922.C17.o3.gs  
 Start 4516  
 GI none  
 Exons 4516..4577, 4757..4928, 6328..6429, 6686..6832

Seq. ID OJ990415\_03.9922.C17  
 Strand -  
 End 7296  
 Method GENSCAN  
 End 6832  
 Score .8

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22346  | Seq. ID | OJ990415_03.9922.C17 |
| Gene No. | 46528  | Strand  | -                    |
| Start    | 4516   | End     | 7296                 |
| Name     | OJ990415_03.9922.C17.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 5636   | End     | 6402                 |
| GI       | none   | Score   | 36                   |
| Exons    | 5636..5692, 5677..5730, 5874..5960, 5880..5957, 6075..6215, 6076..6204, 6323..6400, 6328..6402 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22346  | Seq. ID | OJ990415_03.9922.C17 |
| Gene No. | 46528  | Strand  | -                    |
| Start    | 4516   | End     | 7296                 |
| Name     | OJ990415_03.9922.C17.o3.np   | Method  | AAT/NAP              |
| Start    | 5652   | End     | 7296                 |
| GI       | 6175185  | Score   | 482                  |
| Exons    | 5652..5709, 5878..5957, 6054..6223, 6328..6429, 6626..6832, 7242..7296 |         |                      |

GI Descrip. (AC011437) ankyrin-like protein [Arabidopsis thaliana]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22346  | Seq. ID | OJ990415_03.9922.C17 |
| Gene No. | 46528  | Strand  | -                    |
| Start    | 4516   | End     | 7296                 |
| Name     | OJ990415_03.9922.C17.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 5661   | End     | 6155                 |
| GI       | none   | Score   | 59                   |
| Exons    | 5661..5711, 5665..5730, 5877..5960, 5878..5961, 6054..6095, 6055..6096, 6090..6155 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22346                              | Seq. ID | OJ990415_03.9922.C17 |
| Gene No. | 46528                              | Strand  | -                    |
| Start    | 4516                               | End     | 7296                 |
| Name     | OJ990415_03.9922.C17.o1.tc         | Method  | TBLASTX:Cress        |
| Start    | 5877                               | End     | 6206                 |
| GI       | none                               | Score   | 125                  |
| Exons    | 5877..5939, 6054..6206, 6055..6189 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22346  | Seq. ID | OJ990415_03.9922.C17 |
| Gene No. | 46528  | Strand  | -                    |
| Start    | 4516   | End     | 7296                 |
| Name     | OJ990415_03.9922.C17.o4.gp                                 | Method  | AAT/GAP              |
| Start    | 6193   | End     | 6927                 |
| GI       | none   | Score   | 581                  |
| Exons    | 6193..6223, 6328..6429, 6545..6607, 6686..6832, 6895..6927 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22346  | Seq. ID | OJ990415_03.9922.C17 |
| Gene No. | 46528  | Strand  | -                    |
| Start    | 4516   | End     | 7296                 |
| Name     | OJ990415_03.9922.C17.o4.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 6671   | End     | 7295                 |
| GI       | none   | Score   | 146                  |
| Exons    | 6671..6823, 6705..6824, 6707..6832, 6711..6845, 7242..7295 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22347                      | Seq. ID | OJ990415_03.9922.C18 |
| Gene No. | 46529                      | Strand  | -                    |
| Start    | 380                        | End     | 899                  |
| Name     | OJ990415_03.9922.C18.o1.np | Method  | AAT/NAP              |
| Start    | 380                        | End     | 899                  |

GI 6175185 Score 140  
 Exons 380..466, 821..899  
 GI Descrip. (AC011437) ankyrin-like protein [Arabidopsis thaliana]

Seq. No. 22348 Seq. ID OJ990415\_03.9922.C20  
 Gene No. 46530 Strand +  
 Start 1 End 1184  
 Name OJ990415\_03.9922.C20.o1.np Method AAT/NAP  
 Start 1 End 1184  
 GI 6539570 Score 185  
 Exons 1..50, 1065..1184  
 GI Descrip. (AP000836) hypothetical protein [Oryza sativa]

Seq. No. 22349 Seq. ID OJ990415\_03.9922.C21  
 Gene No. 46531 Strand +  
 Start 68 End 1014  
 Name OJ990415\_03.9922.C21.o1.gs Method GENSCAN  
 Start 68 End 920  
 GI none Score .95  
 Exons 68..167, 289..402, 578..673, 855..920

Seq. No. 22349 Seq. ID OJ990415\_03.9922.C21  
 Gene No. 46531 Strand +  
 Start 68 End 1014  
 Name OJ990415\_03.9922.C21.o1.np Method AAT/NAP  
 Start 68 End 1014  
 GI 6539569 Score 738  
 Exons 68..167, 289..402, 578..673, 855..1014  
 GI Descrip. (AP000836) EST C19724(E10840) corresponds to a region of the  
 predicted gene.; Similar to protein kinase C substrate (P14314)  
 [Oryza sativa]

Seq. No. 22349 Seq. ID OJ990415\_03.9922.C21  
 Gene No. 46531 Strand +  
 Start 68 End 1014  
 Name OJ990415\_03.9922.C21.o1.tm Method TBLASTX:Maize  
 Start 130 End 1013  
 GI none Score 44  
 Exons 130..165, 143..166, 286..351, 288..404, 354..398, 576..671,  
 576..662, 577..672, 833..1009, 848..1009, 855..1010, 855..1013

Seq. No. 22349 Seq. ID OJ990415\_03.9922.C21  
 Gene No. 46531 Strand +  
 Start 68 End 1014  
 Name OJ990415\_03.9922.C21.o1.ts Method TBLASTX:Soybean  
 Start 354 End 1014  
 GI none Score 63  
 Exons 354..398, 615..662, 616..672, 848..1012, 854..1012, 901..1014

Seq. No. 22349 Seq. ID OJ990415\_03.9922.C21  
 Gene No. 46531 Strand +  
 Start 68 End 1014  
 Name OJ990415\_03.9922.C21.o1.gp Method AAT/GAP  
 Start 648 End 1014  
 GI 53729\_1.R1084 Score 352  
 Exons 648..673, 855..1014  
 GI Descrip. '2104691 2.0e-10 (U92794) alpha glucosidase II, beta subunit

[Mus musculus]'

|          |                                 |         |                      |
|----------|---------------------------------|---------|----------------------|
| Seq. No. | 22349                           | Seq. ID | OJ990415_03.9922.C21 |
| Gene No. | 46531                           | Strand  | +                    |
| Start    | 68                              | End     | 1014                 |
| Name     | OJ990415_03.9922.C21.o1.tw      | Method  | TBLASTX:Wheat        |
| Start    | 866                             | End     | 1014                 |
| GI       | none                            | Score   | 227                  |
| Exons    | 866..1012, 866..1009, 892..1014 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22350  | Seq. ID | OJ990415_03.9922.C23 |
| Gene No.    | 46532  | Strand  | -                    |
| Start       | 978  | End     | 1071                 |
| Name        | OJ990415_03.9922.C23.o1.np                     | Method  | AAT/NAP              |
| Start       | 978  | End     | 1071                 |
| GI          | 6539572  | Score   | 117                  |
| Exons       | 978..1071                                      |         |                      |
| GI Descrip. | (AP000836) hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22351  | Seq. ID | OJ990415_03.9922.C25 |
| Gene No.    | 46533  | Strand  | -                    |
| Start       | 1  | End     | 511                  |
| Name        | OJ990415_03.9922.C25.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 511                  |
| GI          | 6721504  | Score   | 501                  |
| Exons       | 1..511   |         |                      |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa] |         |                      |

|          |                                       |         |                      |
|----------|---------------------------------------|---------|----------------------|
| Seq. No. | 22351                                 | Seq. ID | OJ990415_03.9922.C25 |
| Gene No. | 46533                                 | Strand  | -                    |
| Start    | 1                                     | End     | 511                  |
| Name     | OJ990415_03.9922.C25.o1.tm            | Method  | TBLASTX:Maize        |
| Start    | 83                                    | End     | 434                  |
| GI       | none                                  | Score   | 468                  |
| Exons    | 83..427, 102..428, 104..430, 105..434 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22351                      | Seq. ID | OJ990415_03.9922.C25 |
| Gene No. | 46533                      | Strand  | -                    |
| Start    | 1                          | End     | 511                  |
| Name     | OJ990415_03.9922.C25.o1.gs | Method  | GENSCAN              |
| Start    | 102                        | End     | 429                  |
| GI       | none                       | Score   | .83                  |
| Exons    | 102..429                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22351                                  | Seq. ID | OJ990415_03.9922.C25 |
| Gene No. | 46533                                  | Strand  | -                    |
| Start    | 1                                      | End     | 511                  |
| Name     | OJ990415_03.9922.C25.o1.ts             | Method  | TBLASTX:Soybean      |
| Start    | 102                                    | End     | 434                  |
| GI       | none                                   | Score   | 321                  |
| Exons    | 102..428, 104..427, 117..434, 119..430 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22351                      | Seq. ID | OJ990415_03.9922.C25 |
| Gene No. | 46533                      | Strand  | -                    |
| Start    | 1                          | End     | 511                  |
| Name     | OJ990415_03.9922.C25.o1.gp | Method  | AAT/GAP              |
| Start    | 266                        | End     | 429                  |

GI uC-osflcyp179h01b1 Score 299  
 Exons 266..429  
 GI Descrip. '2827715/emb|CAA16688| 2.0e-26 (AL021684) receptor protein kinase - like protein [Arabidopsis thaliana]'

Seq. No. 22351 Seq. ID OJ990415\_03.9922.C25  
 Gene No. 46533 Strand -  
 Start 1 End 511  
 Name OJ990415\_03.9922.C25.o1.tc Method TBLASTX:Cress  
 Start 269 End 434  
 GI none Score 167  
 Exons 269..427, 270..428, 279..434

Seq. No. 22352 Seq. ID OJ990415\_03.9922.C27  
 Gene No. 46534 Strand +  
 Start 178 End 434  
 Name OJ990415\_03.9922.C27.o1.gs Method GENSCAN  
 Start 178 End 434  
 GI none Score .52  
 Exons 178..258, 392..434

Seq. No. 22353 Seq. ID OJ990415\_03.9922.C28  
 Gene No. 46535 Strand +  
 Start 69 End 484  
 Name OJ990415\_03.9922.C28.o1.np Method AAT/NAP  
 Start 69 End 481  
 GI 6721509 Score 307  
 Exons 69..141, 279..481  
 GI Descrip. (AP001072) hypothetical protein [Oryza sativa]

Seq. No. 22353 Seq. ID OJ990415\_03.9922.C28  
 Gene No. 46535 Strand +  
 Start 69 End 484  
 Name OJ990415\_03.9922.C28.o1.gs Method GENSCAN  
 Start 283 End 484  
 GI none Score .98  
 Exons 283..484

Seq. No. 22354 Seq. ID OJ990415\_03.9922.C29  
 Gene No. 46536 Strand +  
 Start 39 End 481  
 Name OJ990415\_03.9922.C29.o1.gp Method AAT/GAP  
 Start 39 End 481  
 GI 23131\_1.R1084 Score 631  
 Exons 39..152, 241..481  
 GI Descrip. '2088652 9.0e-95 (AF002109) 26S proteasome regulatory subunit S12 isolog [Arabidopsis thaliana] >gi 2351376 (U54561) translation initiation factor eIF2 p47 subunit homolog [Arabidopsis thaliana]'

Seq. No. 22354 Seq. ID OJ990415\_03.9922.C29  
 Gene No. 46537 Strand -  
 Start 149 End 3022  
 Name OJ990415\_03.9922.C29.o2.tm Method TBLASTX:Maize  
 Start 38 End 452  
 GI none Score 174  
 Exons 38..115, 39..152, 130..162, 234..311, 235..330, 235..291,

239..334, 240..329, 411..452, 428..448

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 22354                                | Seq. ID | OJ990415_03.9922.C29 |
| Gene No. | 46537                                | Strand  | -                    |
| Start    | 149                                  | End     | 3022                 |
| Name     | OJ990415_03.9922.C29.o2.ts           | Method  | TBLASTX:Soybean      |
| Start    | 38                                   | End     | 404                  |
| GI       | none                                 | Score   | 159                  |
| Exons    | 38..115, 39..152, 235..333, 237..404 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22354  | Seq. ID | OJ990415_03.9922.C29 |
| Gene No. | 46537  | Strand  | -                    |
| Start    | 149  | End     | 3022                 |
| Name     | OJ990415_03.9922.C29.o2.tc                               | Method  | TBLASTX:Cress        |
| Start    | 41   | End     | 377                  |
| GI       | none   | Score   | 137                  |
| Exons    | 41..115, 42..152, 235..330, 238..285, 240..377, 258..338 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22354  | Seq. ID | OJ990415_03.9922.C29 |
| Gene No. | 46537  | Strand  | -                    |
| Start    | 149  | End     | 3022                 |
| Name     | OJ990415_03.9922.C29.o1.gs                             | Method  | GENSCAN              |
| Start    | 149  | End     | 2911                 |
| GI       | none   | Score   | .54                  |
| Exons    | 149..261, 398..455, 1525..1599, 1635..1832, 2444..2911 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22354  | Seq. ID | OJ990415_03.9922.C29 |
| Gene No. | 46537  | Strand  | -                    |
| Start    | 149  | End     | 3022                 |
| Name     | OJ990415_03.9922.C29.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 1467   | End     | 2983                 |
| GI       | none   | Score   | 142                  |
| Exons    | 1467..1517, 2357..2482, 2504..2635, 2591..2692, 2633..2917, 2634..2906, 2663..2761, 2783..2929, 2789..2983 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22354  | Seq. ID | OJ990415_03.9922.C29 |
| Gene No. | 46537  | Strand  | -                    |
| Start    | 149  | End     | 3022                 |
| Name     | OJ990415_03.9922.C29.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1467   | End     | 3022                 |
| GI       | none   | Score   | 39                   |
| Exons    | 1467..1520, 1546..1569, 2357..2617, 2435..2560, 2438..2557, 2492..2542, 2591..2704, 2633..2929, 2645..2749, 2795..2923, 2798..2854, 2799..2927, 2858..3022 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22354  | Seq. ID | OJ990415_03.9922.C29 |
| Gene No. | 46537  | Strand  | -                    |
| Start    | 149  | End     | 3022                 |
| Name     | OJ990415_03.9922.C29.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1496   | End     | 2983                 |
| GI       | none   | Score   | 59                   |
| Exons    | 1496..1624, 1683..1724, 1749..1820, 2453..2632, 2453..2632, 2454..2633, 2489..2563, 2609..2692, 2628..2768, 2633..2773, 2633..2773, 2720..2773, 2780..2905, 2781..2906, 2801..2908, 2813..2917, 2850..2906, 2942..2983 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22354 | Seq. ID | OJ990415_03.9922.C29 |
|----------|-------|---------|----------------------|

|             |   |        |         |
|-------------|---|--------|---------|
| Gene No.    | 46537   | Strand | -       |
| Start       | 149   | End    | 3022    |
| Name        | OJ990415_03.9922.C29.o1.np                                      | Method | AAT/NAP |
| Start       | 2354  | End    | 3022    |
| GI          | 1679733   | Score  | 486     |
| Exons       | 2354..3022  |        |         |
| GI Descrip. | (U77041) polygalacturonase-inhibiting protein [Malus domestica] |        |         |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22355                            | Seq. ID | OJ990415_03.9922.C30 |
| Gene No. | 46538                            | Strand  | -                    |
| Start    | 566                              | End     | 2400                 |
| Name     | OJ990415_03.9922.C30.o1.gs       | Method  | GENSCAN              |
| Start    | 566                              | End     | 2308                 |
| GI       | none                             | Score   | .51                  |
| Exons    | 566..626, 1778..1921, 2084..2308 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22355                              | Seq. ID | OJ990415_03.9922.C30 |
| Gene No. | 46538                              | Strand  | -                    |
| Start    | 566                                | End     | 2400                 |
| Name     | OJ990415_03.9922.C30.o1.tm         | Method  | TBLASTX:Maize        |
| Start    | 1461                               | End     | 2400                 |
| GI       | none                               | Score   | 1102                 |
| Exons    | 1461..2399, 1461..2399, 1486..2400 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22355   | Seq. ID | OJ990415_03.9922.C30 |
| Gene No.    | 46538   | Strand  | -                    |
| Start       | 566   | End     | 2400                 |
| Name        | OJ990415_03.9922.C30.o1.np  | Method  | AAT/NAP              |
| Start       | 1464  | End     | 2400                 |
| GI          | 6939228   | Score   | 1270                 |
| Exons       | 1464..2400  |         |                      |
| GI Descrip. | (AC020579) putative phosphoribosylformylglycinamide synthase [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22355  | Seq. ID | OJ990415_03.9922.C30 |
| Gene No. | 46538  | Strand  | -                    |
| Start    | 566  | End     | 2400                 |
| Name     | OJ990415_03.9922.C30.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 1590   | End     | 2381                 |
| GI       | none   | Score   | 62                   |
| Exons    | 1590..1667, 1591..1668, 1674..1715, 1738..1917, 1740..1907, 1938..2096, 1951..2097, 1953..2096, 2322..2381 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22355  | Seq. ID | OJ990415_03.9922.C30 |
| Gene No. | 46538  | Strand  | -                    |
| Start    | 566  | End     | 2400                 |
| Name     | OJ990415_03.9922.C30.o2.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 1755   | End     | 1994                 |
| GI       | none   | Score   | 200                  |
| Exons    | 1755..1907, 1756..1992, 1756..1992, 1758..1994 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22355                      | Seq. ID | OJ990415_03.9922.C30 |
| Gene No. | 46538                      | Strand  | -                    |
| Start    | 566                        | End     | 2400                 |
| Name     | OJ990415_03.9922.C30.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 1996                       | End     | 2249                 |
| GI       | none                       | Score   | 215                  |



Exons 1996..2199, 1998..2249, 2001..2249

Seq. No. 22356 Seq. ID OJ990415\_03.9922.C31  
Gene No. 46539 Strand +  
Start 4878 End 10394  
Name OJ990415\_03.9922.C31.o4.np Method AAT/NAP  
Start 4878 End 10394  
GI 6069646 Score 628  
Exons 4878..4950, 8402..9197, 9480..9853, 10342..10394  
GI Descrip. (AP000616) similar to putative reverse transcriptase (AC005315)  
[Oryza sativa] gi|6907112|dbj|BAA90639.1| (AP001129) Similar to  
Arabidopsis thaliana chromosome II BAC F9013 genomic sequence,  
putative non-LTR retroelement reverse transcriptase. (AC006248)  
[Oryza sativa]

Seq. No. 22356 Seq. ID OJ990415\_03.9922.C31  
Gene No. 46539 Strand +  
Start 4878 End 10394  
Name OJ990415\_03.9922.C31.o3.gs Method GENSCAN  
Start 6573 End 9785  
GI none Score .54  
Exons 6573..7038, 7294..7450, 7488..8365, 8407..9785

Seq. No. 22356 Seq. ID OJ990415\_03.9922.C31  
Gene No. 46539 Strand +  
Start 4878 End 10394  
Name OJ990415\_03.9922.C31.o3.np Method AAT/NAP  
Start 8374 End 8858  
GI 2462134 Score 292  
Exons 8374..8858  
GI Descrip. (Y13368) reverse transcriptase [Beta vulgaris]

Seq. No. 22356 Seq. ID OJ990415\_03.9922.C31  
Gene No. 46540 Strand -  
Start 1 End 3407  
Name OJ990415\_03.9922.C31.o1.np Method AAT/NAP  
Start 1 End 3269  
GI 6939228 Score 3871  
Exons 1..3269  
GI Descrip. (AC020579) putative phosphoribosylformylglycinamide synthase  
[Arabidopsis thaliana]

Seq. No. 22356 Seq. ID OJ990415\_03.9922.C31  
Gene No. 46540 Strand -  
Start 1 End 3407  
Name OJ990415\_03.9922.C31.o1.gs Method GENSCAN  
Start 17 End 3407  
GI none Score .52  
Exons 17..3258, 3342..3407

Seq. No. 22356 Seq. ID OJ990415\_03.9922.C31  
Gene No. 46540 Strand -  
Start 1 End 3407  
Name OJ990415\_03.9922.C31.o1.gp Method AAT/GAP  
Start 507 End 1399  
GI 11343\_1.R1084 Score 1644  
Exons 507..1399

GI Descrip. '2224663/dbj|BAA20816| 5.0e-74 (AB002359) KIAA0361 [Homo sapiens]'

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22356                      | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46541                      | Strand  | -                    |
| Start    | 5458                       | End     | 6477                 |
| Name     | OJ990415_03.9922.C31.o2.gs | Method  | GENSCAN              |
| Start    | 5458                       | End     | 6477                 |
| GI       | none                       | Score   | 1                    |
| Exons    | 5458..6477                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22356  | Seq. ID | OJ990415_03.9922.C31 |
| Gene No.    | 46541  | Strand  | -                    |
| Start       | 5458   | End     | 6477                 |
| Name        | OJ990415_03.9922.C31.o2.np                                 | Method  | AAT/NAP              |
| Start       | 5470   | End     | 6471                 |
| GI          | 3337095  | Score   | 637                  |
| Exons       | 5470..6471   |         |                      |
| GI Descrip. | (AB016206) polygalacturonase inhibitor (PGIP) [Citrus iyo] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22356                      | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542                      | Strand  | -                    |
| Start    | 10000                      | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 1                          | End     | 823                  |
| GI       | none                       | Score   | 953                  |
| Exons    | 1..822, 1..819, 2..823     |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22356                        | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542                        | Strand  | -                    |
| Start    | 10000                        | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o4.ts   | Method  | TBLASTX:Soybean      |
| Start    | 133                          | End     | 489                  |
| GI       | none                         | Score   | 72                   |
| Exons    | 133..489, 186..350, 275..484 |         |                      |

|          |                                 |         |                      |
|----------|---------------------------------|---------|----------------------|
| Seq. No. | 22356                           | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542                           | Strand  | -                    |
| Start    | 10000                           | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o1.ts      | Method  | TBLASTX:Soybean      |
| Start    | 588                             | End     | 1471                 |
| GI       | none                            | Score   | 786                  |
| Exons    | 588..1076, 589..1470, 590..1471 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22356                              | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542                              | Strand  | -                    |
| Start    | 10000                              | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 1096                               | End     | 1428                 |
| GI       | none                               | Score   | 70                   |
| Exons    | 1096..1428, 1097..1150, 1099..1428 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22356                      | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542                      | Strand  | -                    |
| Start    | 10000                      | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 1477                       | End     | 1855                 |

|          |  |         |                      |
|----------|--|---------|----------------------|
| GI       | none   | Score   | 233                  |
| Exons    | 1477..1854, 1478..1651, 1700..1855   |         |                      |
| Seq. No. | 22356  | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542  | Strand  | -                    |
| Start    | 10000  | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 5467   | End     | 6390                 |
| GI       | none   | Score   | 117                  |
| Exons    | 5467..5592, 5614..5721, 5701..5802, 5743..6030, 5744..6028, 5773..5871, 5893..6039, 5899..6093, 6046..6195, 6052..6144, 6280..6390 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22356  | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542  | Strand  | -                    |
| Start    | 10000  | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 5467   | End     | 6390                 |
| GI       | none   | Score   | 67                   |
| Exons    | 5467..5721, 5497..5667, 5563..5730, 5743..5886, 5747..5887, 5756..5800, 5773..5871, 5773..5802, 5774..5857, 5824..5865, 5831..5875, 5833..5874, 5884..6072, 5887..6036, 5897..6016, 5899..6036, 5905..6030, 5905..5958, 5908..6027, 5908..5979, 5908..6033, 5965..6018, 5965..6018, 5969..6100, 6052..6144, 6055..6198, 6056..6199, 6280..6312, 6307..6390 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22356  | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542  | Strand  | -                    |
| Start    | 10000  | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 5467   | End     | 6330                 |
| GI       | none   | Score   | 47                   |
| Exons    | 5467..5721, 5480..5560, 5548..5667, 5581..5724, 5587..5652, 5701..5814, 5743..6039, 5753..5863, 5803..5871, 5905..6033, 5908..5964, 5909..6037, 5966..6139, 6043..6144, 6046..6198, 6050..6157, 6052..6144, 6094..6144, 6286..6330 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22356                      | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542                      | Strand  | -                    |
| Start    | 10000                      | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o6.tm | Method  | TBLASTX:Maize        |
| Start    | 8005                       | End     | 8358                 |
| GI       | none                       | Score   | 184                  |
| Exons    | 8005..8358                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22356                      | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542                      | Strand  | -                    |
| Start    | 10000                      | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o5.tm | Method  | TBLASTX:Maize        |
| Start    | 8385                       | End     | 8728                 |
| GI       | none                       | Score   | 323                  |
| Exons    | 8385..8702, 8387..8728     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22356                      | Seq. ID | OJ990415_03.9922.C31 |
| Gene No. | 46542                      | Strand  | -                    |
| Start    | 10000                      | End     | 10053                |
| Name     | OJ990415_03.9922.C31.o1.tw | Method  | TBLASTX:Wheat        |

Start 8619  
 GI none  
 Exons 8619..8933, 8786..8944

End 8944  
 Score 191

Seq. No. 22356  
 Gene No. 46542  
 Start 10000  
 Name OJ990415\_03.9922.C31.o3.tm  
 Start 8729  
 GI none  
 Exons 8729..9268, 8730..9416

Seq. ID OJ990415\_03.9922.C31  
 Strand -  
 End 10053  
 Method TBLASTX:Maize  
 End 9416  
 Score 468

Seq. No. 22356  
 Gene No. 46542  
 Start 10000  
 Name OJ990415\_03.9922.C31.o5.ts  
 Start 9036  
 GI none  
 Exons 9036..9386, 9245..9364, 9443..9547, 9462..9584

Seq. ID OJ990415\_03.9922.C31  
 Strand -  
 End 10053  
 Method TBLASTX:Soybean  
 End 9584  
 Score 156

Seq. No. 22356  
 Gene No. 46542  
 Start 10000  
 Name OJ990415\_03.9922.C31.o5.np  
 Start 10000  
 GI 5042454  
 Exons 10000..10053  
 GI Descrip. (AC007789) putative polyprotein [Oryza sativa]

Seq. ID OJ990415\_03.9922.C31  
 Strand -  
 End 10053  
 Method AAT/NAP  
 End 10053  
 Score 71

Seq. No. 22357  
 Gene No. 46543  
 Start 578  
 Name OJ990415\_03.9922.C32.o1.gs  
 Start 578  
 GI none  
 Exons 578..639, 1119..1267, 1334..1829, 1898..3671

Seq. ID OJ990415\_03.9922.C32  
 Strand +  
 End 3671  
 Method GENSCAN  
 End 3671  
 Score .85

Seq. No. 22357  
 Gene No. 46543  
 Start 578  
 Name OJ990415\_03.9922.C32.o1.np  
 Start 1138  
 GI 6907089  
 Exons 1138..3668  
 GI Descrip. (AP001129) hypothetical protein [Oryza sativa]

Seq. ID OJ990415\_03.9922.C32  
 Strand +  
 End 3671  
 Method AAT/NAP  
 End 3668  
 Score 2703

Seq. No. 22357  
 Gene No. 46544  
 Start 4296  
 Name OJ990415\_03.9922.C32.o2.gs  
 Start 4296  
 GI none  
 Exons 4296..6038

Seq. ID OJ990415\_03.9922.C32  
 Strand -  
 End 6185  
 Method GENSCAN  
 End 6038  
 Score .61

Seq. No. 22357  
 Gene No. 46544  
 Start 4296

Seq. ID OJ990415\_03.9922.C32  
 Strand -  
 End 6185

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Name        | OJ990415_03.9922.C32.o2.tm  | Method  | TBLASTX:Maize        |
| Start       | 4296  | End     | 4440                 |
| GI          | none  | Score   | 128                  |
| Exons       | 4296..4439, 4300..4440  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22357   | Seq. ID | OJ990415_03.9922.C32 |
| Gene No.    | 46544   | Strand  | -                    |
| Start       | 4296  | End     | 6185                 |
| Name        | OJ990415_03.9922.C32.o2.np  | Method  | AAT/NAP              |
| Start       | 4299  | End     | 6185                 |
| GI          | 6498441   | Score   | 2773                 |
| Exons       | 4299..4580, 4674..6092, 6150..6185  |         |                      |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                      |
|             |   |         |                      |
| Seq. No.    | 22357   | Seq. ID | OJ990415_03.9922.C32 |
| Gene No.    | 46544   | Strand  | -                    |
| Start       | 4296  | End     | 6185                 |
| Name        | OJ990415_03.9922.C32.o2.tw  | Method  | TBLASTX:Wheat        |
| Start       | 4308  | End     | 4910                 |
| GI          | none  | Score   | 77                   |
| Exons       | 4308..4433, 4312..4434, 4600..4770, 4626..4910, 4627..4905  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22357   | Seq. ID | OJ990415_03.9922.C32 |
| Gene No.    | 46544   | Strand  | -                    |
| Start       | 4296  | End     | 6185                 |
| Name        | OJ990415_03.9922.C32.o1.tw  | Method  | TBLASTX:Wheat        |
| Start       | 4911  | End     | 5292                 |
| GI          | none  | Score   | 238                  |
| Exons       | 4911..5291, 4942..5292  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22357   | Seq. ID | OJ990415_03.9922.C32 |
| Gene No.    | 46544   | Strand  | -                    |
| Start       | 4296  | End     | 6185                 |
| Name        | OJ990415_03.9922.C32.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 5106  | End     | 5429                 |
| GI          | none  | Score   | 219                  |
| Exons       | 5106..5429, 5119..5412  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22357   | Seq. ID | OJ990415_03.9922.C32 |
| Gene No.    | 46544   | Strand  | -                    |
| Start       | 4296  | End     | 6185                 |
| Name        | OJ990415_03.9922.C32.o3.tw  | Method  | TBLASTX:Wheat        |
| Start       | 5622  | End     | 5943                 |
| GI          | none  | Score   | 77                   |
| Exons       | 5622..5882, 5758..5943  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22358   | Seq. ID | OJ990415_03.9922.C33 |
| Gene No.    | 46545   | Strand  | -                    |
| Start       | 1   | End     | 1856                 |
| Name        | OJ990415_03.9922.C33.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1856                 |
| GI          | 6498441   | Score   | 2293                 |
| Exons       | 1..732, 907..1041, 1225..1598, 1662..1856   |         |                      |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type  |         |                      |

## retrotransposon RetroSor1. (AF098806) [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22358                      | Seq. ID | OJ990415_03.9922.C33 |
| Gene No. | 46545                      | Strand  | -                    |
| Start    | 1                          | End     | 1856                 |
| Name     | OJ990415_03.9922.C33.o3.tw | Method  | TBLASTX:Wheat        |
| Start    | 1                          | End     | 266                  |
| GI       | none                       | Score   | 137                  |
| Exons    | 1..207, 3..266             |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22358                      | Seq. ID | OJ990415_03.9922.C33 |
| Gene No. | 46545                      | Strand  | -                    |
| Start    | 1                          | End     | 1856                 |
| Name     | OJ990415_03.9922.C33.o1.gs | Method  | GENSCAN              |
| Start    | 23                         | End     | 1856                 |
| GI       | none                       | Score   | .46                  |
| Exons    | 23..1598, 1662..1856       |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22358                      | Seq. ID | OJ990415_03.9922.C33 |
| Gene No. | 46545                      | Strand  | -                    |
| Start    | 1                          | End     | 1856                 |
| Name     | OJ990415_03.9922.C33.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 570                        | End     | 941                  |
| GI       | none                       | Score   | 90                   |
| Exons    | 570..941, 781..924         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22358                      | Seq. ID | OJ990415_03.9922.C33 |
| Gene No. | 46545                      | Strand  | -                    |
| Start    | 1                          | End     | 1856                 |
| Name     | OJ990415_03.9922.C33.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 600                        | End     | 1020                 |
| GI       | none                       | Score   | 298                  |
| Exons    | 600..1019, 625..1020       |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22358                      | Seq. ID | OJ990415_03.9922.C33 |
| Gene No. | 46545                      | Strand  | -                    |
| Start    | 1                          | End     | 1856                 |
| Name     | OJ990415_03.9922.C33.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 693                        | End     | 1077                 |
| GI       | none                       | Score   | 236                  |
| Exons    | 693..1076, 712..1077       |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22358                              | Seq. ID | OJ990415_03.9922.C33 |
| Gene No. | 46545                              | Strand  | -                    |
| Start    | 1                                  | End     | 1856                 |
| Name     | OJ990415_03.9922.C33.o1.tm         | Method  | TBLASTX:Maize        |
| Start    | 1104                               | End     | 1460                 |
| GI       | none                               | Score   | 75                   |
| Exons    | 1104..1220, 1104..1460, 1114..1425 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22358                              | Seq. ID | OJ990415_03.9922.C33 |
| Gene No. | 46545                              | Strand  | -                    |
| Start    | 1                                  | End     | 1856                 |
| Name     | OJ990415_03.9922.C33.o1.tw         | Method  | TBLASTX:Wheat        |
| Start    | 1128                               | End     | 1590                 |
| GI       | none                               | Score   | 213                  |
| Exons    | 1128..1589, 1134..1589, 1135..1590 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22358                      | Seq. ID | OJ990415_03.9922.C33 |
| Gene No. | 46545                      | Strand  | -                    |
| Start    | 1                          | End     | 1856                 |
| Name     | OJ990415_03.9922.C33.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 1185                       | End     | 1550                 |
| GI       | none                       | Score   | 126                  |
| Exons    | 1185..1319, 1326..1550     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22359                      | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46546                      | Strand  | +                    |
| Start    | 3186                       | End     | 3824                 |
| Name     | OJ990415_03.9922.C34.o2.gs | Method  | GENSCAN              |
| Start    | 3186                       | End     | 3824                 |
| GI       | none                       | Score   | .7                   |
| Exons    | 3186..3824                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No.    | 46547  | Strand  | -                    |
| Start       | 1  | End     | 2794                 |
| Name        | OJ990415_03.9922.C34.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 2677                 |
| GI          | 5042454  | Score   | 2011                 |
| Exons       | 1..53, 494..1868, 1922..2028, 2528..2677       |         |                      |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22359   | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46547   | Strand  | -                    |
| Start    | 1   | End     | 2794                 |
| Name     | OJ990415_03.9922.C34.o1.gs                    | Method  | GENSCAN              |
| Start    | 144   | End     | 2794                 |
| GI       | none  | Score   | .89                  |
| Exons    | 144..1921, 1958..2129, 2532..2574, 2730..2794 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22359                      | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46548                      | Strand  | -                    |
| Start    | 3947                       | End     | 5124                 |
| Name     | OJ990415_03.9922.C34.o1.gp | Method  | AAT/GAP              |
| Start    | 3947                       | End     | 4243                 |
| GI       | 4969189                    | Score   | 489                  |
| Exons    | 3947..4243                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22359                      | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46548                      | Strand  | -                    |
| Start    | 3947                       | End     | 5124                 |
| Name     | OJ990415_03.9922.C34.o3.gs | Method  | GENSCAN              |
| Start    | 4141                       | End     | 5070                 |
| GI       | none                       | Score   | .98                  |
| Exons    | 4141..5070                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22359                      | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46548                      | Strand  | -                    |
| Start    | 3947                       | End     | 5124                 |
| Name     | OJ990415_03.9922.C34.o2.gp | Method  | AAT/GAP              |
| Start    | 4779                       | End     | 5124                 |
| GI       | 62575_1.R1084              | Score   | 597                  |
| Exons    | 4779..5124                 |         |                      |

GI Descrip. '1143381/emb|CAA88846| 2.0e-09 (Z49063) polygalacturonase inhibitor [Actinidia deliciosa]'

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22359                              | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46549                              | Strand  | -                    |
| Start    | 5315                               | End     | 8909                 |
| Name     | OJ990415_03.9922.C34.o4.gs         | Method  | GENSCAN              |
| Start    | 5315                               | End     | 8909                 |
| GI       | none                               | Score   | .44                  |
| Exons    | 5315..5488, 7720..7756, 7957..8909 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No.    | 46549  | Strand  | -                    |
| Start       | 5315   | End     | 8909                 |
| Name        | OJ990415_03.9922.C34.o3.gp   | Method  | AAT/GAP              |
| Start       | 8059   | End     | 8449                 |
| GI          | LIB3433-037-P1-K1-G8   | Score   | 734                  |
| Exons       | 8059..8449   |         |                      |
| GI Descrip. | '1679733/gb AAB19212.1  4.0e-16 (U77041) polygalacturonase-inhibiting protein [Malus domestica]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o1.tw                   | Method  | TBLASTX:Wheat        |
| Start    | 843  | End     | 1181                 |
| GI       | none   | Score   | 86                   |
| Exons    | 843..1100, 877..1083, 1083..1181, 1126..1164 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22359                      | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550                      | Strand  | -                    |
| Start    | 9406                       | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o9.tm | Method  | TBLASTX:Maize        |
| Start    | 954                        | End     | 1193                 |
| GI       | none                       | Score   | 68                   |
| Exons    | 954..1193, 955..1059       |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o3.tm                     | Method  | TBLASTX:Maize        |
| Start    | 3228   | End     | 3764                 |
| GI       | none   | Score   | 205                  |
| Exons    | 3228..3518, 3239..3517, 3555..3764, 3615..3695 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 4153   | End     | 8810                 |
| GI       | none   | Score   | 69                   |
| Exons    | 4153..4212, 4154..4213, 4219..4269, 4291..4407, 4381..4473, 4396..4476, 4513..4614, 4522..4848, 4595..4750, 4894..4944, 7905..7958, 7968..8012, 7968..8081, 8034..8147, 8163..8201, 8181..8285, 8244..8282, 8304..8501, 8334..8672, 8385..8570, 8407..8571, 8694..8810 |         |                      |



|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4159   | End     | 8759                 |
| GI       | none   | Score   | 64                   |
| Exons    | 4159..4212, 4207..4335, 4219..4410, 4220..4342, 4279..4338, 4360..4482, 4411..4497, 4423..4473, 4507..4854, 4522..4617, 4523..4750, 4586..4753, 4894..4944, 7899..7964, 7944..8162, 7954..8148, 7965..8072, 8022..8072, 8157..8201, 8181..8285, 8244..8282, 8304..8423, 8325..8366, 8325..8495, 8328..8459, 8334..8675, 8391..8570, 8407..8571, 8407..8574, 8637..8759 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 4225   | End     | 8292                 |
| GI       | none   | Score   | 81                   |
| Exons    | 4225..4332, 4240..4422, 4247..4423, 4360..4479, 4361..4474, 4372..4476, 4423..4479, 4504..4605, 4505..4606, 7983..8060, 7983..8153, 7984..8145, 8101..8151, 8151..8201, 8244..8285, 8245..8292 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 4610   | End     | 8847                 |
| GI       | none   | Score   | 123                  |
| Exons    | 4610..4756, 4666..4761, 4798..5070, 4799..4951, 8295..8468, 8349..8546, 8421..8573, 8422..8574, 8613..8819, 8614..8847 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o5.gs   | Method  | GENSCAN              |
| Start    | 9406   | End     | 22062                |
| GI       | none   | Score   | .6                   |
| Exons    | 9406..9518, 10069..10123, 10447..10617, 10801..10890, 11433..11544, 11941..11996, 12139..12325, 13193..13241, 13559..13631, 14168..14309, 14398..14594, 15326..15601, 15865..16721, 17333..17599, 18546..19242, 19456..19700, 20445..20605, 20720..20925, 21493..22062 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o3.np   | Method  | AAT/NAP              |
| Start    | 10034  | End     | 18998                |
| GI       | 2462838  | Score   | 1824                 |
| Exons    | 10034..10123, 10447..10617, 10801..10909, 11408..11544, 11941..11996, 12139..12403, 13193..13241, 13559..13631, 13710..13988, 14168..14228, 14398..14594, 15326..15601, 15865..16400, 18963..18998 |         |                      |

GI Descrip. (AF000657) unknown protein [Arabidopsis thaliana]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 10447  | End     | 12276                |
| GI       | none   | Score   | 194                  |
| Exons    | 10447..10617, 10472..10615, 10798..10893, 10802..10888,<br>11418..11543, 11420..11539, 11433..11549, 11434..11544,<br>11726..11788, 11728..11811, 11744..11818, 11929..11997,<br>11937..11999, 11940..11999, 12130..12276, 12134..12253,<br>12138..12275, 12139..12276 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o4.ts   | Method  | TBLASTX:Soybean      |
| Start    | 10447  | End     | 11796                |
| GI       | none   | Score   | 64                   |
| Exons    | 10447..10617, 10449..10610, 10464..10622, 10472..10615,<br>10766..10888, 10798..10893, 11430..11543, 11433..11549,<br>11434..11544, 11725..11796, 11726..11788 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22359   | Seq. ID | OJ990415_03.9922.C34 |
| Gene No.    | 46550   | Strand  | -                    |
| Start       | 9406  | End     | 22274                |
| Name        | OJ990415_03.9922.C34.o4.gp  | Method  | AAT/GAP              |
| Start       | 11937   | End     | 12277                |
| GI          | LIB3432-040-P1-K1-E7  | Score   | 231                  |
| Exons       | 11937..11996, 12139..12277  |         |                      |
| GI Descrip. | '2462838 3.0e-15 (AF000657) unknown protein [Arabidopsis thaliana]' |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22359   | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550   | Strand  | -                    |
| Start    | 9406  | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o3.tc  | Method  | TBLASTX:Cress        |
| Start    | 13738   | End     | 14237                |
| GI       | none  | Score   | 63                   |
| Exons    | 13738..13797, 13848..13961, 13848..13994, 13849..14004,<br>14166..14237, 14168..14236 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550  | Strand  | -                    |
| Start    | 9406   | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o8.tm   | Method  | TBLASTX:Maize        |
| Start    | 13854  | End     | 14418                |
| GI       | none   | Score   | 144                  |
| Exons    | 13854..13988, 13855..13962, 13870..13989, 14166..14309,<br>14167..14313, 14168..14320, 14168..14311, 14384..14416,<br>14395..14418 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22359                      | Seq. ID | OJ990415_03.9922.C34 |
| Gene No. | 46550                      | Strand  | -                    |
| Start    | 9406                       | End     | 22274                |
| Name     | OJ990415_03.9922.C34.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 13866                      | End     | 14562                |
| GI       | none                       | Score   | 84                   |

Exons 13866..13994, 13870..13962, 13889..13990, 14166..14336,  
14167..14271, 14168..14314, 14393..14455, 14394..14561,  
14397..14558, 14398..14562

Seq. No. 22359 Seq. ID OJ990415\_03.9922.C34  
Gene No. 46550 Strand -  
Start 9406 End 22274  
Name OJ990415\_03.9922.C34.o4.np Method AAT/NAP  
Start 16587 End 21593  
GI 6503010 Score 787  
Exons 16587..16749, 18563..19242, 19456..19700, 20445..20683,  
20720..20877, 20930..21336, 21428..21593  
GI Descrip. (AF174427) formin-like protein AHF1 [Arabidopsis thaliana]

Seq. No. 22359 Seq. ID OJ990415\_03.9922.C34  
Gene No. 46550 Strand -  
Start 9406 End 22274  
Name OJ990415\_03.9922.C34.o6.tm Method TBLASTX:Maize  
Start 18479 End 18811  
GI none Score 109  
Exons 18479..18658, 18560..18661, 18574..18666, 18653..18811,  
18659..18793, 18670..18810

Seq. No. 22359 Seq. ID OJ990415\_03.9922.C34  
Gene No. 46550 Strand -  
Start 9406 End 22274  
Name OJ990415\_03.9922.C34.o3.ts Method TBLASTX:Soybean  
Start 18832 End 19248  
GI none Score 138  
Exons 18832..19002, 19004..19240, 19012..19248, 19080..19247

Seq. No. 22359 Seq. ID OJ990415\_03.9922.C34  
Gene No. 46550 Strand -  
Start 9406 End 22274  
Name OJ990415\_03.9922.C34.o2.tm Method TBLASTX:Maize  
Start 19014 End 19593  
GI none Score 264  
Exons 19014..19244, 19027..19248, 19028..19240, 19031..19261,  
19032..19244, 19455..19592, 19456..19590, 19456..19593

Seq. No. 22359 Seq. ID OJ990415\_03.9922.C34  
Gene No. 46550 Strand -  
Start 9406 End 22274  
Name OJ990415\_03.9922.C34.o2.tc Method TBLASTX:Cress  
Start 19030 End 19732  
GI none Score 143  
Exons 19030..19248, 19031..19243, 19430..19732, 19456..19698

Seq. No. 22359 Seq. ID OJ990415\_03.9922.C34  
Gene No. 46550 Strand -  
Start 9406 End 22274  
Name OJ990415\_03.9922.C34.o5.ts Method TBLASTX:Soybean  
Start 19457 End 19704  
GI none Score 105  
Exons 19457..19702, 19459..19701, 19495..19704

Seq. No. 22359 Seq. ID OJ990415\_03.9922.C34

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 46550  | Strand  | -                    |
| Start       | 9406   | End     | 22274                |
| Name        | OJ990415_03.9922.C34.o5.tm   | Method  | TBLASTX:Maize        |
| Start       | 19603  | End     | 20772                |
| GI          | none   | Score   | 90                   |
| Exons       | 19603..19701, 19605..19703, 19612..19704, 19649..19711,<br>20441..20605, 20442..20600, 20443..20607, 20443..20604,<br>20719..20772, 20723..20770               |         |                      |
|             |  |         |                      |
| Seq. No.    | 22359  | Seq. ID | OJ990415_03.9922.C34 |
| Gene No.    | 46550  | Strand  | -                    |
| Start       | 9406   | End     | 22274                |
| Name        | OJ990415_03.9922.C34.o5.np   | Method  | AAT/NAP              |
| Start       | 20677  | End     | 22274                |
| GI          | 1076802  | Score   | 381                  |
| Exons       | 20677..21967, 22095..22274   |         |                      |
| GI Descrip. | extensin-like protein - maize gi 600118 emb CAA84230  (Z34465)<br>extensin-like protein [Zea mays] gi 1096557 prf  2111476A<br>extensin-like domain [Zea mays] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22360  | Seq. ID | OJ990415_03.9922.C35 |
| Gene No.    | 46551  | Strand  | +                    |
| Start       | 2018   | End     | 3842                 |
| Name        | OJ990415_03.9922.C35.o2.gs   | Method  | GENSCAN              |
| Start       | 2018   | End     | 3842                 |
| GI          | none   | Score   | .83                  |
| Exons       | 2018..2074, 2106..2296, 3620..3842   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22360  | Seq. ID | OJ990415_03.9922.C35 |
| Gene No.    | 46551  | Strand  | +                    |
| Start       | 2018   | End     | 3842                 |
| Name        | OJ990415_03.9922.C35.o1.gp   | Method  | AAT/GAP              |
| Start       | 3371   | End     | 3451                 |
| GI          | 38012_1.R1084  | Score   | 103                  |
| Exons       | 3371..3451   |         |                      |
| GI Descrip. | '4097947/gb U72255 OSU72255 2.0e-23 Oryza sativa<br>beta-1,3-glucanase precursor (Gns9) gene, complete cds'  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22360  | Seq. ID | OJ990415_03.9922.C35 |
| Gene No.    | 46551  | Strand  | +                    |
| Start       | 2018   | End     | 3842                 |
| Name        | OJ990415_03.9922.C35.o1.np   | Method  | AAT/NAP              |
| Start       | 3639   | End     | 3839                 |
| GI          | 2281092  | Score   | 193                  |
| Exons       | 3639..3839   |         |                      |
| GI Descrip. | (AC002333) hypothetical protein [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22360  | Seq. ID | OJ990415_03.9922.C35 |
| Gene No.    | 46552  | Strand  | +                    |
| Start       | 6131   | End     | 10889                |
| Name        | OJ990415_03.9922.C35.o2.gp   | Method  | AAT/GAP              |
| Start       | 6051   | End     | 7851                 |
| GI          | 4879565  | Score   | 679                  |
| Exons       | 6051..6167, 6687..6763, 6871..7024, 7555..7625, 7828..7851   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22360  | Seq. ID | OJ990415_03.9922.C35 |
| Gene No.    | 46552  | Strand  | +                    |

|       |  |        |         |
|-------|--|--------|---------|
| Start | 6131   | End    | 10889   |
| Name  | OJ990415_03.9922.C35.o3.gs   | Method | GENSCAN |
| Start | 6131   | End    | 10875   |
| GI    | none   | Score  | .87     |
| Exons | 6131..6167, 6687..6763, 6871..7024, 7555..7625, 7864..7929, 8226..8300, 8411..8443, 8561..8641, 8758..8814, 8900..8989, 9087..9288, 10489..10661, 10725..10875 |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22360  | Seq. ID | OJ990415_03.9922.C35 |
| Gene No. | 46552  | Strand  | +                    |
| Start    | 6131   | End     | 10889                |
| Name     | OJ990415_03.9922.C35.o3.gp                             | Method  | AAT/GAP              |
| Start    | 10086  | End     | 10889                |
| GI       | none   | Score   | 937                  |
| Exons    | 10086..10254, 10343..10405, 10489..10661, 10744..10889 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22360  | Seq. ID | OJ990415_03.9922.C35 |
| Gene No.    | 46552  | Strand  | +                    |
| Start       | 6131   | End     | 10889                |
| Name        | OJ990415_03.9922.C35.o3.np                             | Method  | AAT/NAP              |
| Start       | 10312  | End     | 10889                |
| GI          | 6175185  | Score   | 283                  |
| Exons       | 10312..10405, 10489..10661, 10744..10889               |         |                      |
| GI Descrip. | (AC011437) ankyrin-like protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22360                      | Seq. ID | OJ990415_03.9922.C35 |
| Gene No. | 46553                      | Strand  | -                    |
| Start    | 1097                       | End     | 1408                 |
| Name     | OJ990415_03.9922.C35.o1.gs | Method  | GENSCAN              |
| Start    | 1097                       | End     | 1408                 |
| GI       | none                       | Score   | .98                  |
| Exons    | 1097..1210, 1250..1408     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22360  | Seq. ID | OJ990415_03.9922.C35 |
| Gene No. | 46554  | Strand  |                      |
| Start    | 3631   | End     | 3842                 |
| Name     | OJ990415_03.9922.C35.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 3631   | End     | 3842                 |
| GI       | none   | Score   | 114                  |
| Exons    | 3631..3828, 3632..3748, 3647..3835, 3648..3836, 3792..3842 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22360                      | Seq. ID | OJ990415_03.9922.C35 |
| Gene No. | 46554                      | Strand  |                      |
| Start    | 3631                       | End     | 3842                 |
| Name     | OJ990415_03.9922.C35.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 3648                       | End     | 3827                 |
| GI       | none                       | Score   | 207                  |
| Exons    | 3648..3827, 3653..3817     |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22360   | Seq. ID | OJ990415_03.9922.C35 |
| Gene No. | 46555   | Strand  |                      |
| Start    | 6116  | End     | 8122                 |
| Name     | OJ990415_03.9922.C35.o2.tm  | Method  | TBLASTX:Maize        |
| Start    | 6116  | End     | 8122                 |
| GI       | none  | Score   | 83                   |
| Exons    | 6116..6169, 6117..6167, 6124..6186, 6125..6169, 6671..6769, 6685..6762, 6870..6974, 6871..6981, 7785..7931, 7813..7935, |         |                      |

7816..7917, 7827..7931, 8033..8122, 8033..8122

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22360  | Seq. ID | OJ990415_03.9922.C35 |
| Gene No. | 46556  | Strand  |                      |
| Start    | 10226  | End     | 10862                |
| Name     | OJ990415_03.9922.C35.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 10226  | End     | 10862                |
| GI       | none   | Score   | 53                   |
| Exons    | 10226..10252, 10228..10254, 10339..10407, 10342..10404,<br>10479..10607, 10557..10607, 10607..10669, 10743..10823,<br>10824..10862 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22361  | Seq. ID | OJ990415_03.9922.C36 |
| Gene No. | 46557  | Strand  | +                    |
| Start    | 91   | End     | 542                  |
| Name     | OJ990415_03.9922.C36.o1.tm                             | Method  | TBLASTX:Maize        |
| Start    | 27   | End     | 364                  |
| GI       | none   | Score   | 132                  |
| Exons    | 27..173, 55..177, 58..159, 69..173, 275..364, 275..364 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22361                      | Seq. ID | OJ990415_03.9922.C36 |
| Gene No. | 46557                      | Strand  | +                    |
| Start    | 91                         | End     | 542                  |
| Name     | OJ990415_03.9922.C36.o1.gs | Method  | GENSCAN              |
| Start    | 91                         | End     | 542                  |
| GI       | none                       | Score   | .88                  |
| Exons    | 91..171, 468..542          |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22362                      | Seq. ID | OJ990415_03.9922.C38 |
| Gene No. | 46558                      | Strand  | -                    |
| Start    | 30                         | End     | 676                  |
| Name     | OJ990415_03.9922.C38.o1.gs | Method  | GENSCAN              |
| Start    | 30                         | End     | 676                  |
| GI       | none                       | Score   | .45                  |
| Exons    | 30..676                    |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22362                                  | Seq. ID | OJ990415_03.9922.C38 |
| Gene No. | 46558                                  | Strand  | -                    |
| Start    | 30                                     | End     | 676                  |
| Name     | OJ990415_03.9922.C38.o1.ts             | Method  | TBLASTX:Soybean      |
| Start    | 116                                    | End     | 664                  |
| GI       | none                                   | Score   | 60                   |
| Exons    | 116..238, 153..257, 314..664, 336..455 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22362                      | Seq. ID | OJ990415_03.9922.C38 |
| Gene No. | 46558                      | Strand  | -                    |
| Start    | 30                         | End     | 676                  |
| Name     | OJ990415_03.9922.C38.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 125                        | End     | 520                  |
| GI       | none                       | Score   | 128                  |
| Exons    | 125..520, 138..347         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22363                      | Seq. ID | OJ990415_03.9922.C39 |
| Gene No. | 46559                      | Strand  | +                    |
| Start    | 355                        | End     | 594                  |
| Name     | OJ990415_03.9922.C39.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 322                        | End     | 541                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| GI          | none  | Score   | 197                  |
| Exons       | 322..531, 347..538, 392..541  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22363   | Seq. ID | OJ990415_03.9922.C39 |
| Gene No.    | 46559   | Strand  | +                    |
| Start       | 355   | End     | 594                  |
| Name        | OJ990415_03.9922.C39.o1.tc  | Method  | TBLASTX:Cress        |
| Start       | 334   | End     | 585                  |
| GI          | none  | Score   | 95                   |
| Exons       | 334..585, 346..555, 392..583  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22363   | Seq. ID | OJ990415_03.9922.C39 |
| Gene No.    | 46559   | Strand  | +                    |
| Start       | 355   | End     | 594                  |
| Name        | OJ990415_03.9922.C39.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 350   | End     | 585                  |
| GI          | none  | Score   | 274                  |
| Exons       | 350..562, 355..585, 392..583  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22363   | Seq. ID | OJ990415_03.9922.C39 |
| Gene No.    | 46559   | Strand  | +                    |
| Start       | 355   | End     | 594                  |
| Name        | OJ990415_03.9922.C39.o1.gp  | Method  | AAT/GAP              |
| Start       | 355   | End     | 594                  |
| GI          | 23131.1.R1084   | Score   | 428                  |
| Exons       | 355..594  |         |                      |
| GI Descrip. | '2088652 9.0e-95 (AF002109) 26S proteasome regulatory subunit S12 isolog [Arabidopsis thaliana] >gi_2351376 (U54561) translation initiation factor eIF2 p47 subunit homolog [Arabidopsis thaliana]' |         |                      |
|             |   |         |                      |
| Seq. No.    | 22363   | Seq. ID | OJ990415_03.9922.C39 |
| Gene No.    | 46559   | Strand  | +                    |
| Start       | 355   | End     | 594                  |
| Name        | OJ990415_03.9922.C39.o1.gs  | Method  | GENSCAN              |
| Start       | 355   | End     | 584                  |
| GI          | none  | Score   | .59                  |
| Exons       | 355..584  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22363   | Seq. ID | OJ990415_03.9922.C39 |
| Gene No.    | 46559   | Strand  | +                    |
| Start       | 355   | End     | 594                  |
| Name        | OJ990415_03.9922.C39.o1.np  | Method  | AAT/NAP              |
| Start       | 355   | End     | 594                  |
| GI          | 2088652   | Score   | 261                  |
| Exons       | 355..594  |         |                      |
| GI Descrip. | (AF002109) 26S proteasome regulatory subunit [Arabidopsis thaliana] gi 2351376 (U54561) translation initiation factor eIF2 p47 subunit homolog [Arabidopsis thaliana]                               |         |                      |
|             |   |         |                      |
| Seq. No.    | 22364   | Seq. ID | OJ990415_03.9922.C42 |
| Gene No.    | 46560   | Strand  | +                    |
| Start       | 409   | End     | 472                  |
| Name        | OJ990415_03.9922.C42.o1.gs  | Method  | GENSCAN              |
| Start       | 409   | End     | 472                  |
| GI          | none  | Score   | .75                  |
| Exons       | 409..472  |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22365                      | Seq. ID | OJ990415_03.9922.C43 |
| Gene No. | 46561                      | Strand  | -                    |
| Start    | 643                        | End     | 1165                 |
| Name     | OJ990415_03.9922.C43.o1.gs | Method  | GENSCAN              |
| Start    | 643                        | End     | 867                  |
| GI       | none                       | Score   | .76                  |
| Exons    | 643..867                   |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22365   | Seq. ID | OJ990415_03.9922.C43 |
| Gene No.    | 46561   | Strand  | -                    |
| Start       | 643   | End     | 1165                 |
| Name        | OJ990415_03.9922.C43.o1.np  | Method  | AAT/NAP              |
| Start       | 646   | End     | 1165                 |
| GI          | 6539575   | Score   | 293                  |
| Exons       | 646..853, 1145..1165  |         |                      |
| GI Descrip. | (AP000836) hypothetical protein [Oryza sativa]<br>gi 6721503 dbj BAA89545.1  (AP001072) hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22366  | Seq. ID | OJ990415_03.9922.C45 |
| Gene No.    | 46562  | Strand  | +                    |
| Start       | 69   | End     | 249                  |
| Name        | OJ990415_03.9922.C45.o1.np                     | Method  | AAT/NAP              |
| Start       | 69   | End     | 249                  |
| GI          | 6721508  | Score   | 279                  |
| Exons       | 69..249  |         |                      |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22367  | Seq. ID | OJ990415_03.9922.C48 |
| Gene No.    | 46563  | Strand  | -                    |
| Start       | 1  | End     | 487                  |
| Name        | OJ990415_03.9922.C48.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 487                  |
| GI          | 6721513  | Score   | 163                  |
| Exons       | 1..42, 279..487                                |         |                      |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa] |         |                      |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22368   | Seq. ID | OJ990405_02.9922.C2 |
| Gene No.    | 46564   | Strand  | +                   |
| Start       | 1   | End     | 637                 |
| Name        | OJ990405_02.9922.C2.o1.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 637                 |
| GI          | 3738327   | Score   | 314                 |
| Exons       | 1..213, 276..383, 492..637  |         |                     |
| GI Descrip. | (AC005170) putative serine carboxypeptidase II [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22368  | Seq. ID | OJ990405_02.9922.C2 |
| Gene No. | 46564  | Strand  | +                   |
| Start    | 1  | End     | 637                 |
| Name     | OJ990405_02.9922.C2.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 2  | End     | 546                 |
| GI       | none   | Score   | 268                 |
| Exons    | 2..184, 3..227, 3..185, 263..379, 274..384, 274..381, 480..542, 490..531, 490..546, 491..544 |         |                     |



|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22368  | Seq. ID | OJ990405_02.9922.C2 |
| Gene No. | 46564  | Strand  | +                   |
| Start    | 1  | End     | 637                 |
| Name     | OJ990405_02.9922.C2.ol.tc  | Method  | TBLASTX:Cress       |
| Start    | 6  | End     | 562                 |
| GI       | none   | Score   | 42                  |
| Exons    | 6..53, 61..183, 69..236, 71..184, 263..379, 274..378, 494..562, 496..561 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22368  | Seq. ID | OJ990405_02.9922.C2 |
| Gene No. | 46564  | Strand  | +                   |
| Start    | 1  | End     | 637                 |
| Name     | OJ990405_02.9922.C2.ol.ts                                | Method  | TBLASTX:Soybean     |
| Start    | 69   | End     | 559                 |
| GI       | none   | Score   | 134                 |
| Exons    | 69..185, 71..184, 254..382, 274..351, 494..559, 496..558 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22369                     | Seq. ID | OJ990405_02.9922.C3 |
| Gene No. | 46565                     | Strand  | -                   |
| Start    | 55                        | End     | 362                 |
| Name     | OJ990405_02.9922.C3.ol.gp | Method  | AAT/GAP             |
| Start    | 55                        | End     | 362                 |
| GI       | none                      | Score   | 582                 |
| Exons    | 55..362                   |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22370   | Seq. ID | OJ990405_02.9922.C5 |
| Gene No. | 46566   | Strand  | +                   |
| Start    | 340   | End     | 2683                |
| Name     | OJ990405_02.9922.C5.ol.gs   | Method  | GENSCAN             |
| Start    | 340   | End     | 2683                |
| GI       | none  | Score   | .69                 |
| Exons    | 340..1104, 1187..1265, 1327..1610, 1840..1923, 2004..2070, 2133..2683 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22370  | Seq. ID | OJ990405_02.9922.C5 |
| Gene No. | 46567  | Strand  | -                   |
| Start    | 3115   | End     | 5541                |
| Name     | OJ990405_02.9922.C5.o2.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 3104   | End     | 3354                |
| GI       | none   | Score   | 52                  |
| Exons    | 3104..3145, 3109..3354, 3182..3352, 3187..3354 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22370   | Seq. ID | OJ990405_02.9922.C5 |
| Gene No.    | 46567   | Strand  | -                   |
| Start       | 3115  | End     | 5541                |
| Name        | OJ990405_02.9922.C5.ol.np   | Method  | AAT/NAP             |
| Start       | 3115  | End     | 5541                |
| GI          | 4544372   | Score   | 729                 |
| Exons       | 3115..4690, 4790..5178, 5245..5541                                      |         |                     |
| GI Descrip. | (AC006920) putative retroelement pol polyprotein [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22370                     | Seq. ID | OJ990405_02.9922.C5 |
| Gene No. | 46567                     | Strand  | -                   |
| Start    | 3115                      | End     | 5541                |
| Name     | OJ990405_02.9922.C5.ol.tw | Method  | TBLASTX:Wheat       |
| Start    | 3130                      | End     | 3537                |

|          |  |         |                     |
|----------|--|---------|---------------------|
| GI       | none   | Score   | 68                  |
| Exons    | 3130..3537, 3164..3307                         |         |                     |
|          |  |         |                     |
| Seq. No. | 22370  | Seq. ID | OJ990405_02.9922.C5 |
| Gene No. | 46567  | Strand  | -                   |
| Start    | 3115   | End     | 5541                |
| Name     | OJ990405_02.9922.C5.o3.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 3864   | End     | 4253                |
| GI       | none   | Score   | 109                 |
| Exons    | 3864..3920, 3951..4058, 4092..4253             |         |                     |
|          |  |         |                     |
| Seq. No. | 22370  | Seq. ID | OJ990405_02.9922.C5 |
| Gene No. | 46567  | Strand  | -                   |
| Start    | 3115   | End     | 5541                |
| Name     | OJ990405_02.9922.C5.o4.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 3897   | End     | 4178                |
| GI       | none   | Score   | 227                 |
| Exons    | 3897..4178                                     |         |                     |
|          |  |         |                     |
| Seq. No. | 22370  | Seq. ID | OJ990405_02.9922.C5 |
| Gene No. | 46567  | Strand  | -                   |
| Start    | 3115   | End     | 5541                |
| Name     | OJ990405_02.9922.C5.o2.tm                      | Method  | TBLASTX:Maize       |
| Start    | 3927   | End     | 4259                |
| GI       | none   | Score   | 214                 |
| Exons    | 3927..4259                                     |         |                     |
|          |  |         |                     |
| Seq. No. | 22370  | Seq. ID | OJ990405_02.9922.C5 |
| Gene No. | 46567  | Strand  | -                   |
| Start    | 3115   | End     | 5541                |
| Name     | OJ990405_02.9922.C5.o2.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 4515   | End     | 4913                |
| GI       | none   | Score   | 76                  |
| Exons    | 4515..4784, 4824..4913                         |         |                     |
|          |  |         |                     |
| Seq. No. | 22370  | Seq. ID | OJ990405_02.9922.C5 |
| Gene No. | 46567  | Strand  | -                   |
| Start    | 3115   | End     | 5541                |
| Name     | OJ990405_02.9922.C5.o1.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 4548   | End     | 4958                |
| GI       | none   | Score   | 87                  |
| Exons    | 4548..4799, 4633..4800, 4821..4958, 4825..4956 |         |                     |
|          |  |         |                     |
| Seq. No. | 22370  | Seq. ID | OJ990405_02.9922.C5 |
| Gene No. | 46567  | Strand  | -                   |
| Start    | 3115   | End     | 5541                |
| Name     | OJ990405_02.9922.C5.o3.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 5109   | End     | 5541                |
| GI       | none   | Score   | 94                  |
| Exons    | 5109..5297, 5122..5253, 5298..5540, 5473..5541 |         |                     |
|          |  |         |                     |
| Seq. No. | 22370  | Seq. ID | OJ990405_02.9922.C5 |
| Gene No. | 46567  | Strand  | -                   |
| Start    | 3115   | End     | 5541                |
| Name     | OJ990405_02.9922.C5.o1.tm                      | Method  | TBLASTX:Maize       |
| Start    | 5265   | End     | 5540                |
| GI       | none   | Score   | 61                  |

Exons 5265..5540, 5266..5409, 5473..5538

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22371                     | Seq. ID | OJ990405_02.9922.C6 |
| Gene No. | 46568                     | Strand  | -                   |
| Start    | 379                       | End     | 843                 |
| Name     | OJ990405_02.9922.C6.o1.gs | Method  | GENSCAN             |
| Start    | 379                       | End     | 843                 |
| GI       | none                      | Score   | .97                 |
| Exons    | 379..843                  |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22371                     | Seq. ID | OJ990405_02.9922.C6 |
| Gene No. | 46568                     | Strand  | -                   |
| Start    | 379                       | End     | 843                 |
| Name     | OJ990405_02.9922.C6.o1.ts | Method  | TBLASTX:Soybean     |
| Start    | 382                       | End     | 711                 |
| GI       | none                      | Score   | 199                 |
| Exons    | 382..711                  |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22372  | Seq. ID | OJ990405_02.9922.C7 |
| Gene No.    | 46569  | Strand  | +                   |
| Start       | 673  | End     | 1054                |
| Name        | OJ990405_02.9922.C7.o1.gp  | Method  | AAT/GAP             |
| Start       | 673  | End     | 1054                |
| GI          | uC-osflcyp033a04b1   | Score   | 543                 |
| Exons       | 673..1054  |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22372   | Seq. ID | OJ990405_02.9922.C7 |
| Gene No.    | 46570   | Strand  | -                   |
| Start       | 605   | End     | 2334                |
| Name        | OJ990405_02.9922.C7.o1.np                       | Method  | AAT/NAP             |
| Start       | 605   | End     | 2334                |
| GI          | 4680186   | Score   | 338                 |
| Exons       | 605..806, 1645..1706, 2211..2334                |         |                     |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22373  | Seq. ID | OJ990405_02.9922.C8 |
| Gene No. | 46571  | Strand  | +                   |
| Start    | 751  | End     | 4792                |
| Name     | OJ990405_02.9922.C8.o1.gs  | Method  | GENSCAN             |
| Start    | 751  | End     | 4057                |
| GI       | none   | Score   | .75                 |
| Exons    | 751..950, 1172..1229, 1722..1742, 2632..2683, 2989..3300, 3306..3446, 3957..4057 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22373   | Seq. ID | OJ990405_02.9922.C8 |
| Gene No.    | 46571   | Strand  | +                   |
| Start       | 751   | End     | 4792                |
| Name        | OJ990405_02.9922.C8.o2.np   | Method  | AAT/NAP             |
| Start       | 3071  | End     | 4792                |
| GI          | 6063554   | Score   | 331                 |
| Exons       | 3071..3290, 3957..3985, 4619..4792  |         |                     |
| GI Descrip. | (AP000615) ESTs AU075609(C63344),C71850(E0464),C98611(E0464) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                     |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22373  | Seq. ID | OJ990405_02.9922.C8  |
| Gene No.    | 46572  | Strand  | +                    |
| Start       | 5470   | End     | 5618                 |
| Name        | OJ990405_02.9922.C8.o2.gs  | Method  | GENSCAN              |
| Start       | 5470   | End     | 5618                 |
| GI          | none   | Score   | .98                  |
| Exons       | 5470..5618   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22374  | Seq. ID | OJ990405_02.9922.C9  |
| Gene No.    | 46573  | Strand  | +                    |
| Start       | 3176   | End     | 3379                 |
| Name        | OJ990405_02.9922.C9.o2.np  | Method  | AAT/NAP              |
| Start       | 3176   | End     | 3379                 |
| GI          | 4680186  | Score   | 251                  |
| Exons       | 3176..3379   |         |                      |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22374  | Seq. ID | OJ990405_02.9922.C9  |
| Gene No.    | 46574  | Strand  | -                    |
| Start       | 1  | End     | 3018                 |
| Name        | OJ990405_02.9922.C9.o1.np  | Method  | AAT/NAP              |
| Start       | 1  | End     | 1398                 |
| GI          | 161752   | Score   | 116                  |
| Exons       | 1..39, 298..409, 677..761, 901..982, 1016..1152, 1300..1398  |         |                      |
| GI Descrip. | (L03710) cnjB [Tetrahymena thermophila] gi 737494 prf  1922371A<br>cnjB gene [Tetrahymena thermophila]                       |         |                      |
|             |  |         |                      |
| Seq. No.    | 22374  | Seq. ID | OJ990405_02.9922.C9  |
| Gene No.    | 46574  | Strand  | -                    |
| Start       | 1  | End     | 3018                 |
| Name        | OJ990405_02.9922.C9.o1.gs  | Method  | GENSCAN              |
| Start       | 230  | End     | 3018                 |
| GI          | none   | Score   | .56                  |
| Exons       | 230..717, 1108..1663, 2974..3018   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22374  | Seq. ID | OJ990405_02.9922.C9  |
| Gene No.    | 46575  | Strand  | -                    |
| Start       | 2926   | End     | 3307                 |
| Name        | OJ990405_02.9922.C9.o1.gp  | Method  | AAT/GAP              |
| Start       | 2926   | End     | 3307                 |
| GI          | uC-osflcyp033a04b1   | Score   | 655                  |
| Exons       | 2926..3307   |         |                      |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic<br>DNA, chromosome 1, clone:P0711E10'                          |         |                      |
|             |  |         |                      |
| Seq. No.    | 22375  | Seq. ID | OJ990405_02.9922.C10 |
| Gene No.    | 46576  | Strand  | +                    |
| Start       | 1  | End     | 416                  |
| Name        | OJ990405_02.9922.C10.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 416                  |
| GI          | 4378066  | Score   | 220                  |
| Exons       | 1..416   |         |                      |
| GI Descrip. | (AF098806) polyprotein [Sorghum bicolor]<br>gi 4680208 gb AAD27571.1 AF114171_12 (AF114171) polyprotein<br>[Sorghum bicolor] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22375  | Seq. ID | OJ990405_02.9922.C10 |

Gene No. 46576  
 Start 1  
 Name OJ990405\_02.9922.C10.o1.tw  
 Start 51  
 GI none  
 Exons 51..356, 52..357, 244..357

Strand +  
 End 416  
 Method TBLASTX:Wheat  
 End 357  
 Score 197

Seq. No. 22375  
 Gene No. 46576  
 Start 1  
 Name OJ990405\_02.9922.C10.o1.gs  
 Start 106  
 GI none  
 Exons 106..318

Seq. ID OJ990405\_02.9922.C10  
 Strand +  
 End 416  
 Method GENSCAN  
 End 318  
 Score .77

Seq. No. 22376  
 Gene No. 46577  
 Start 266  
 Name OJ990405\_02.9922.C11.o1.gs  
 Start 266  
 GI none  
 Exons 266..429, 574..688

Seq. ID OJ990405\_02.9922.C11  
 Strand -  
 End 697  
 Method GENSCAN  
 End 688  
 Score .93

Seq. No. 22376  
 Gene No. 46577  
 Start 266  
 Name OJ990405\_02.9922.C11.o1.tw  
 Start 272  
 GI none  
 Exons 272..661, 273..479, 274..672, 275..661

Seq. ID OJ990405\_02.9922.C11  
 Strand -  
 End 697  
 Method TBLASTX:Wheat  
 End 672  
 Score 182

Seq. No. 22376  
 Gene No. 46577  
 Start 266  
 Name OJ990405\_02.9922.C11.o1.np  
 Start 399  
 GI 6742729  
 Exons 399..697  
 GI Descrip. (AF121139) RIM2 protein [Oryza sativa]

Seq. ID OJ990405\_02.9922.C11  
 Strand -  
 End 697  
 Method AAT/NAP  
 End 697  
 Score 406

Seq. No. 22377  
 Gene No. 46578  
 Start 1192  
 Name OJ990405\_02.9922.C12.o1.gs  
 Start 1192  
 GI none  
 Exons 1192..1332, 1462..1769

Seq. ID OJ990405\_02.9922.C12  
 Strand +  
 End 1769  
 Method GENSCAN  
 End 1769  
 Score .78

Seq. No. 22378  
 Gene No. 46579  
 Start 1  
 Name OJ990405\_02.9922.C13.o1.np  
 Start 1  
 GI 6006381  
 Exons 1..130  
 GI Descrip. (AP000559) hypothetical protein [Oryza sativa]

Seq. ID OJ990405\_02.9922.C13  
 Strand -  
 End 130  
 Method AAT/NAP  
 End 130  
 Score 120

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22379  | Seq. ID | OJ990405_02.9922.C14 |
| Gene No.    | 46580  | Strand  | -                    |
| Start       | 6537   | End     | 6735                 |
| Name        | OJ990405_02.9922.C14.o1.np                     | Method  | AAT/NAP              |
| Start       | 6537   | End     | 6735                 |
| GI          | 4680203  | Score   | 116                  |
| Exons       | 6537..6735                                     |         |                      |
| GI Descrip. | (AF114171) TNP2-like protein [Sorghum bicolor] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22379                      | Seq. ID | OJ990405_02.9922.C14 |
| Gene No. | 46581                      | Strand  | -                    |
| Start    | 9246                       | End     | 10591                |
| Name     | OJ990405_02.9922.C14.o3.gs | Method  | GENSCAN              |
| Start    | 9246                       | End     | 10591                |
| GI       | none                       | Score   | .57                  |
| Exons    | 9246..9504, 10554..10591   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46582  | Strand  | +                    |
| Start    | 260  | End     | 2163                 |
| Name     | OJ990405_02.9922.C15.o1.gs                             | Method  | GENSCAN              |
| Start    | 260  | End     | 2163                 |
| GI       | none   | Score   | .76                  |
| Exons    | 260..355, 445..537, 1123..1304, 1668..1943, 2011..2163 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22380   | Seq. ID | OJ990405_02.9922.C15 |
| Gene No.    | 46583   | Strand  | +                    |
| Start       | 14160   | End     | 19105                |
| Name        | OJ990405_02.9922.C15.o6.np  | Method  | AAT/NAP              |
| Start       | 14160   | End     | 19105                |
| GI          | 4572668   | Score   | 312                  |
| Exons       | 14160..14195, 15571..16549, 19084..19105                                |         |                      |
| GI Descrip. | (AC006954) putative retroelement pol polyprotein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46583  | Strand  | +                    |
| Start    | 14160  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o4.gs   | Method  | GENSCAN              |
| Start    | 14901  | End     | 17867                |
| GI       | none   | Score   | .63                  |
| Exons    | 14901..15126, 15320..15429, 15571..15699, 16017..16329, 16371..16506, 16602..16833, 17044..17191, 17638..17718, 17746..17867 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22380   | Seq. ID | OJ990405_02.9922.C15 |
| Gene No.    | 46583   | Strand  | +                    |
| Start       | 14160   | End     | 19105                |
| Name        | OJ990405_02.9922.C15.o4.np                                | Method  | AAT/NAP              |
| Start       | 14919   | End     | 15152                |
| GI          | 60100   | Score   | 65                   |
| Exons       | 14919..15063, 15091..15152                                |         |                      |
| GI Descrip. | (Z11140) p24/p25/p7 [Human immunodeficiency virus type 1] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22380 | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46583 | Strand  | +                    |
| Start    | 14160 | End     | 19105                |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990405_02.9922.C15.o7.np   | Method  | AAT/NAP              |
| Start       | 16898  | End     | 18323                |
| GI          | 443482   | Score   | 160                  |
| Exons       | 16898..17008, 17618..17718, 17940..18046, 18186..18323   |         |                      |
| GI Descrip. | Triticum aestivum  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No.    | 46583  | Strand  | +                    |
| Start       | 14160  | End     | 19105                |
| Name        | OJ990405_02.9922.C15.o1.gp   | Method  | AAT/GAP              |
| Start       | 18650  | End     | 19015                |
| GI          | 4736_1.R1084   | Score   | 673                  |
| Exons       | 18650..19015   |         |                      |
| GI Descrip. | '2244867/emb CAB10289.1  4.0e-58 (Z97337) hydroxynitrile lyase like protein [Arabidopsis thaliana]'          |         |                      |
|             |  |         |                      |
| Seq. No.    | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No.    | 46584  | Strand  | -                    |
| Start       | 3213   | End     | 14305                |
| Name        | OJ990405_02.9922.C15.o2.gs   | Method  | GENSCAN              |
| Start       | 3213   | End     | 7695                 |
| GI          | none   | Score   | .64                  |
| Exons       | 3213..4627, 4641..7276, 7379..7695   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No.    | 46584  | Strand  | -                    |
| Start       | 3213   | End     | 14305                |
| Name        | OJ990405_02.9922.C15.o1.np   | Method  | AAT/NAP              |
| Start       | 3218   | End     | 8130                 |
| GI          | 6466937  | Score   | 1814                 |
| Exons       | 3218..7284, 8013..8130   |         |                      |
| GI Descrip. | (AC011621) putative retroelement pol polyprotein [Arabidopsis thaliana]                                      |         |                      |
|             |  |         |                      |
| Seq. No.    | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No.    | 46584  | Strand  | -                    |
| Start       | 3213   | End     | 14305                |
| Name        | OJ990405_02.9922.C15.o2.np   | Method  | AAT/NAP              |
| Start       | 7314   | End     | 13580                |
| GI          | 4773895  | Score   | 781                  |
| Exons       | 7314..7373, 8247..8560, 9039..9906, 10192..10528, 10554..10728, 10981..11293, 11333..12008, 13519..13580     |         |                      |
| GI Descrip. | (AF076243) putative polyprotein [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No.    | 46584  | Strand  | -                    |
| Start       | 3213   | End     | 14305                |
| Name        | OJ990405_02.9922.C15.o3.gs   | Method  | GENSCAN              |
| Start       | 8925   | End     | 14305                |
| GI          | none   | Score   | .52                  |
| Exons       | 8925..9030, 10884..11011, 11448..11698, 12223..12525, 12698..13010, 13437..13694, 13809..14086, 14284..14305 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No.    | 46585  | Strand  | -                    |
| Start       | 18794  | End     | 19105                |
| Name        | OJ990405_02.9922.C15.o4.ts   | Method  | TBLASTX:Soybean      |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 30   | End   | 17716 |
| GI    | none   | Score | 118   |
| Exons | 30..149, 31..147, 261..338, 262..345, 443..538, 444..542, 450..542, 1212..1271, 17615..17716 |       |       |

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 22380                                | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                                | Strand  | -                    |
| Start    | 18794                                | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o2.tc           | Method  | TBLASTX:Cress        |
| Start    | 31                                   | End     | 330                  |
| GI       | none                                 | Score   | 149                  |
| Exons    | 31..147, 42..146, 262..330, 264..329 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 42   | End     | 1319                 |
| GI       | none   | Score   | 114                  |
| Exons    | 42..101, 43..147, 257..328, 257..328, 258..338, 259..345, 438..542, 443..538, 1212..1319 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 438  | End     | 2133                 |
| GI       | none   | Score   | 151                  |
| Exons    | 438..542, 443..538, 1212..1319, 1662..1883, 1670..1882, 2032..2133 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o6.tm   | Method  | TBLASTX:Maize        |
| Start    | 1666   | End     | 1911                 |
| GI       | none   | Score   | 66                   |
| Exons    | 1666..1761, 1667..1777, 1667..1888, 1668..1901, 1668..1889, 1672..1902, 1804..1911 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1667   | End     | 19044                |
| GI       | none   | Score   | 295                  |
| Exons    | 1667..1900, 1668..1910, 1684..1923, 2023..2160, 17935..18012, 17937..18002, 18185..18289, 18186..18323, 18873..19013, 18877..19044 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o8.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 2296   | End     | 2744                 |
| GI       | none   | Score   | 43                   |
| Exons    | 2296..2391, 2364..2636, 2405..2596, 2406..2744, 2407..2715 |         |                      |



|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o1.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 2406   | End     | 8189                 |
| GI       | none   | Score   | 205                  |
| Exons    | 2406..2939, 2593..2892, 2786..2950, 2915..3019, 8103..8189 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22380                      | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                      | Strand  | -                    |
| Start    | 18794                      | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o7.tw | Method  | TBLASTX:Wheat        |
| Start    | 2484                       | End     | 2903                 |
| GI       | none                       | Score   | 133                  |
| Exons    | 2484..2669, 2688..2903     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o16.tm                                | Method  | TBLASTX:Maize        |
| Start    | 2748   | End     | 8207                 |
| GI       | none   | Score   | 97                   |
| Exons    | 2748..2930, 2749..2904, 2901..3011, 2912..3019, 8103..8207 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 3213   | End     | 3977                 |
| GI       | none   | Score   | 42                   |
| Exons    | 3213..3239, 3217..3237, 3276..3557, 3300..3500, 3570..3977, 3586..3975, 3627..3977 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22380                              | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                              | Strand  | -                    |
| Start    | 18794                              | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o5.tw         | Method  | TBLASTX:Wheat        |
| Start    | 3558                               | End     | 3870                 |
| GI       | none                               | Score   | 157                  |
| Exons    | 3558..3812, 3562..3870, 3571..3870 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22380                      | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                      | Strand  | -                    |
| Start    | 18794                      | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o6.tw | Method  | TBLASTX:Wheat        |
| Start    | 3918                       | End     | 4089                 |
| GI       | none                       | Score   | 92                   |
| Exons    | 3918..4088, 3934..4089     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o12.tm                    | Method  | TBLASTX:Maize        |
| Start    | 3978   | End     | 4283                 |
| GI       | none   | Score   | 157                  |
| Exons    | 3978..4118, 3979..4107, 4119..4283, 4126..4206 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o1.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 4140   | End     | 4535                 |
| GI       | none   | Score   | 77                   |
| Exons    | 4140..4535, 4141..4275, 4149..4403, 4318..4452 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o4.tm                     | Method  | TBLASTX:Maize        |
| Start    | 4293   | End     | 4749                 |
| GI       | none   | Score   | 95                   |
| Exons    | 4293..4538, 4524..4613, 4612..4749, 4625..4747 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22380                      | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                      | Strand  | -                    |
| Start    | 18794                      | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o7.ts | Method  | TBLASTX:Soybean      |
| Start    | 4747                       | End     | 4989                 |
| GI       | none                       | Score   | 96                   |
| Exons    | 4747..4989, 4841..4987     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22380                      | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                      | Strand  | -                    |
| Start    | 18794                      | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 4750                       | End     | 5268                 |
| GI       | none                       | Score   | 346                  |
| Exons    | 4750..5268, 4766..5242     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22380                      | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                      | Strand  | -                    |
| Start    | 18794                      | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o3.tw | Method  | TBLASTX:Wheat        |
| Start    | 4900                       | End     | 5298                 |
| GI       | none                       | Score   | 153                  |
| Exons    | 4900..5298, 4934..5242     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22380                              | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                              | Strand  | -                    |
| Start    | 18794                              | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o3.ts         | Method  | TBLASTX:Soybean      |
| Start    | 5014                               | End     | 5373                 |
| GI       | none                               | Score   | 120                  |
| Exons    | 5014..5373, 5015..5242, 5233..5355 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22380                      | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                      | Strand  | -                    |
| Start    | 18794                      | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o3.tm | Method  | TBLASTX:Maize        |
| Start    | 5305                       | End     | 5772                 |
| GI       | none                       | Score   | 282                  |
| Exons    | 5305..5772, 5309..5767     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22380                      | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                      | Strand  | -                    |
| Start    | 18794                      | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 5350                       | End     | 5832                 |
| GI       | none                       | Score   | 197                  |
| Exons    | 5350..5832, 5384..5824     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o10.tm                                | Method  | TBLASTX:Maize        |
| Start    | 6037   | End     | 6672                 |
| GI       | none   | Score   | 42                   |
| Exons    | 6037..6132, 6214..6519, 6356..6478, 6559..6672, 6569..6640 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22380                              | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                              | Strand  | -                    |
| Start    | 18794                              | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o14.tm        | Method  | TBLASTX:Maize        |
| Start    | 6838                               | End     | 7242                 |
| GI       | none                               | Score   | 69                   |
| Exons    | 6838..7101, 7007..7105, 7135..7242 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No.    | 46585  | Strand  | -                    |
| Start       | 18794  | End     | 19105                |
| Name        | OJ990405_02.9922.C15.o5.ts                                 | Method  | TBLASTX:Soybean      |
| Start       | 9058   | End     | 9488                 |
| GI          | 5509260  | Score   | 61                   |
| Exons       | 9058..9099, 9139..9213, 9144..9233, 9249..9488, 9265..9486 |         |                      |
| GI Descrip. | -  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o4.tc                     | Method  | TBLASTX:Cress        |
| Start    | 9153   | End     | 9377                 |
| GI       | none   | Score   | 53                   |
| Exons    | 9153..9230, 9162..9251, 9249..9377, 9286..9363 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o15.tm                                  | Method  | TBLASTX:Maize        |
| Start    | 9192   | End     | 17190                |
| GI       | none   | Score   | 96                   |
| Exons    | 9192..9230, 9243..9467, 9252..9467, 9265..9468, 17101..17190 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o4.tw   | Method  | TBLASTX:Wheat        |
| Start    | 10119  | End     | 16518                |
| GI       | none   | Score   | 275                  |
| Exons    | 10119..10244, 10254..10457, 10460..10546, 10560..10661, 15921..16307, 15977..16243, 16396..16518 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o11.tm  | Method  | TBLASTX:Maize        |
| Start    | 10161  | End     | 16536                |
| GI       | none   | Score   | 63                   |
| Exons    | 10161..10445, 10366..10446, 10468..10491, 16014..16349, 16052..16195, 16378..16536 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o3.tc                             | Method  | TBLASTX:Cress        |
| Start    | 10164  | End     | 16539                |
| GI       | none   | Score   | 154                  |
| Exons    | 10164..10457, 16101..16349, 16103..16225, 16372..16539 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o6.ts   | Method  | TBLASTX:Soybean      |
| Start    | 10293  | End     | 16265                |
| GI       | none   | Score   | 66                   |
| Exons    | 10293..10457, 10294..10455, 15900..15950, 15933..16265, 15954..16265 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o5.tm   | Method  | TBLASTX:Maize        |
| Start    | 10569  | End     | 16013                |
| GI       | none   | Score   | 64                   |
| Exons    | 10569..10649, 10569..10658, 10686..10808, 10686..10886, 10834..10869, 10952..11023, 15558..15617, 15559..15630, 15663..15749, 15664..15756, 15752..15892, 15759..15896, 15775..15897, 15924..16013, 15933..16013 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o9.tm   | Method  | TBLASTX:Maize        |
| Start    | 12125  | End     | 14492                |
| GI       | none   | Score   | 81                   |
| Exons    | 12125..12283, 12125..12388, 12129..12380, 14178..14243, 14180..14326, 14200..14322, 14317..14484, 14319..14492, 14327..14491, 14331..14492 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22380  | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585  | Strand  | -                    |
| Start    | 18794  | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o13.tm  | Method  | TBLASTX:Maize        |
| Start    | 17968  | End     | 19014                |
| GI       | none   | Score   | 69                   |
| Exons    | 17968..18027, 18184..18327, 18185..18325, 18186..18329, 18876..19013, 18877..19014 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22380                      | Seq. ID | OJ990405_02.9922.C15 |
| Gene No. | 46585                      | Strand  | -                    |
| Start    | 18794                      | End     | 19105                |
| Name     | OJ990405_02.9922.C15.o5.gs | Method  | GENSCAN              |
| Start    | 18794                      | End     | 18977                |
| GI       | none                       | Score   | .91                  |
| Exons    | 18794..18892, 18915..18977 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22380   | Seq. ID | OJ990405_02.9922.C15 |
| Gene No.    | 46585   | Strand  | -                    |
| Start       | 18794   | End     | 19105                |
| Name        | OJ990405_02.9922.C15.o8.np                                    | Method  | AAT/NAP              |
| Start       | 18818   | End     | 19105                |
| GI          | 4539671   | Score   | 88                   |
| Exons       | 18818..19013, 19073..19105                                    |         |                      |
| GI Descrip. | (AF061282) serine carboxypeptidase [ <i>Sorghum bicolor</i> ] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22381                      | Seq. ID | OJ990405_02.9922.C17 |
| Gene No. | 46586                      | Strand  | -                    |
| Start    | 102                        | End     | 157                  |
| Name     | OJ990405_02.9922.C17.o1.gs | Method  | GENSCAN              |
| Start    | 102                        | End     | 157                  |
| GI       | none                       | Score   | .43                  |
| Exons    | 102..157                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No.    | 46587  | Strand  | +                    |
| Start       | 1  | End     | 3271                 |
| Name        | OJ990405_02.9922.C18.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 3190                 |
| GI          | 5579092  | Score   | 387                  |
| Exons       | 1..57, 1618..1992, 2918..3190  |         |                      |
| GI Descrip. | (AF100954) gibberellin 2-oxidase-like protein [ <i>Pisum sativum</i> ] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46587                      | Strand  | +                    |
| Start    | 1                          | End     | 3271                 |
| Name     | OJ990405_02.9922.C18.o1.gs | Method  | GENSCAN              |
| Start    | 1754                       | End     | 1982                 |
| GI       | none                       | Score   | .95                  |
| Exons    | 1754..1982                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22382   | Seq. ID | OJ990405_02.9922.C18 |
| Gene No.    | 46587   | Strand  | +                    |
| Start       | 1   | End     | 3271                 |
| Name        | OJ990405_02.9922.C18.o1.gp  | Method  | AAT/GAP              |
| Start       | 2892  | End     | 3271                 |
| GI          | LIB3432-037-P1-K1-D3  | Score   | 715                  |
| Exons       | 2892..3271  |         |                      |
| GI Descrip. | '5579092/gb AAD45424.1  5.0e-20 (AF100954) gibberellin 2-oxidase-like protein [ <i>Pisum sativum</i> ]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46588                      | Strand  | +                    |
| Start    | 4445                       | End     | 4911                 |
| Name     | OJ990405_02.9922.C18.o2.gp | Method  | AAT/GAP              |
| Start    | 4445                       | End     | 4911                 |

|          |  |         |                      |
|----------|--|---------|----------------------|
| GI       | none   | Score   | 910                  |
| Exons    | 4445..4911                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o9.tm                     | Method  | TBLASTX:Maize        |
| Start    | 1752   | End     | 3148                 |
| GI       | none   | Score   | 35                   |
| Exons    | 1752..1769, 1834..1941, 1924..1995, 2912..3148 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o9.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 1752   | End     | 3148                 |
| GI       | none   | Score   | 35                   |
| Exons    | 1752..1769, 1834..1941, 1924..1995, 2912..3148 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o2.gs   | Method  | GENSCAN              |
| Start    | 2891   | End     | 8257                 |
| GI       | none   | Score   | .81                  |
| Exons    | 2891..3205, 3762..4077, 4932..5215, 5306..5354, 5717..6210, 6464..6675, 6760..6925, 7634..8257 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 4540   | End     | 6593                 |
| GI       | none   | Score   | 46                   |
| Exons    | 4540..4569, 4668..4706, 4673..4702, 4676..4708, 4703..4729, 4704..4745, 4705..4734, 4714..4794, 4719..4796, 4727..4813, 4752..4796, 4893..5219, 4902..5216, 4903..5217, 4904..5218, 5253..5372, 5306..5356, 5308..5373, 5645..6208, 5716..6213, 5717..6211, 5719..6213, 5721..6227, 6462..6575, 6463..6576, 6464..6592, 6468..6593 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o2.np   | Method  | AAT/NAP              |
| Start    | 4898   | End     | 9990                 |
| GI       | 4200165  | Score   | 1954                 |
| Exons    | 4898..5215, 5306..5354, 5717..6210, 6464..6675, 6760..6925, 7634..7867, 9970..9990 |         |                      |

GI Descrip. (Y16262) neutral invertase [Daucus carota]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                      | Strand  | -                    |
| Start    | 2891                       | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o3.tc | Method  | TBLASTX:Cress        |
| Start    | 4913                       | End     | 5170                 |
| GI       | none                       | Score   | 143                  |

Exons 4913..5170, 4950..5126, 5036..5143

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4913   | End     | 5827                 |
| GI       | none   | Score   | 216                  |
| Exons    | 4913..5218, 4914..5225, 5306..5356, 5307..5363, 5716..5826, 5717..5827 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22382   | Seq. ID | OJ990405_02.9922.C18 |
| Gene No.    | 46589   | Strand  | -                    |
| Start       | 2891  | End     | 17653                |
| Name        | OJ990405_02.9922.C18.o3.gp  | Method  | AAT/GAP              |
| Start       | 4917  | End     | 6046                 |
| GI          | 14154_1.R1084   | Score   | 1277                 |
| Exons       | 4917..5215, 5306..5354, 5717..6046  |         |                      |
| GI Descrip. | '4200165/emb CAA76145  1.0e-106 (Y16262) neutral invertase [Daucus carota]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 5174   | End     | 6051                 |
| GI       | none   | Score   | 64                   |
| Exons    | 5174..5218, 5175..5225, 5306..5356, 5307..5357, 5705..5818, 5716..5829, 5716..6051, 5717..6046, 5881..6051 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22382                              | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                              | Strand  | -                    |
| Start    | 2891                               | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o1.ts         | Method  | TBLASTX:Soybean      |
| Start    | 5828                               | End     | 6499                 |
| GI       | none                               | Score   | 248                  |
| Exons    | 5828..6214, 5833..6213, 6464..6499 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                      | Strand  | -                    |
| Start    | 2891                       | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o7.tw | Method  | TBLASTX:Wheat        |
| Start    | 5962                       | End     | 6213                 |
| GI       | none                       | Score   | 76                   |
| Exons    | 5962..6213, 5963..6085     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 6100   | End     | 7813                 |
| GI       | none   | Score   | 201                  |
| Exons    | 6100..6213, 6462..6671, 6464..6679, 6468..6677, 6758..6949, 6758..6928, 6777..6941, 7634..7792, 7634..7813 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22382 | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589 | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 2891   | End    | 17653         |
| Name  | OJ990405_02.9922.C18.o5.tw   | Method | TBLASTX:Wheat |
| Start | 6468   | End    | 6914          |
| GI    | none   | Score  | 150           |
| Exons | 6468..6677, 6470..6679, 6758..6847, 6759..6791, 6860..6910, 6864..6914 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 6500   | End     | 7813                 |
| GI       | none   | Score   | 129                  |
| Exons    | 6500..6520, 6518..6547, 6546..6677, 6548..6679, 6565..6690, 6758..6922, 6758..6925, 7640..7798, 7641..7733, 7769..7813, 7773..7805 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o5.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 6593   | End     | 6928                 |
| GI       | none   | Score   | 67                   |
| Exons    | 6593..6679, 6594..6677, 6595..6687, 6758..6928, 6759..6926 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No.    | 46589  | Strand  | -                    |
| Start       | 2891   | End     | 17653                |
| Name        | OJ990405_02.9922.C18.o4.gp   | Method  | AAT/GAP              |
| Start       | 6623   | End     | 7941                 |
| GI          | LIB3431-060-P1-K1-C7   | Score   | 756                  |
| Exons       | 6623..6675, 6760..6925, 7634..7818, 7909..7941                             |         |                      |
| GI Descrip. | '4200165/emb CAA76145  5.0e-58 (Y16262) neutral invertase [Daucus carota]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                      | Strand  | -                    |
| Start    | 2891                       | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o8.tm | Method  | TBLASTX:Maize        |
| Start    | 7634                       | End     | 7813                 |
| GI       | none                       | Score   | 240                  |
| Exons    | 7634..7807, 7634..7813     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                      | Strand  | -                    |
| Start    | 2891                       | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o5.gp | Method  | AAT/GAP              |
| Start    | 8008                       | End     | 8468                 |
| GI       | none                       | Score   | 850                  |
| Exons    | 8008..8468                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                      | Strand  | -                    |
| Start    | 2891                       | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o3.gs | Method  | GENSCAN              |
| Start    | 8602                       | End     | 17653                |
| GI       | none                       | Score   | .76                  |



Exons 8602..8686, 9694..9799, 9855..10034, 10149..10296, 11689..11736,  
12045..12272, 12758..12875, 13070..16824, 16867..16990,  
17168..17215, 17220..17371, 17524..17653

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No.    | 46589  | Strand  | -                    |
| Start       | 2891   | End     | 17653                |
| Name        | OJ990405_02.9922.C18.o3.np   | Method  | AAT/NAP              |
| Start       | 13069  | End     | 16974                |
| GI          | 6539553  | Score   | 6773                 |
| Exons       | 13069..16974   |         |                      |
| GI Descrip. | (AP000836) Similar to Oryza australiensis retrotransposon RIRE1 (D85597) [Oryza sativa] gi 6539590 dbj BAA88206.1  (AP000837) Similar to Oryza australiensis retrotransposon RIRE1 (D85597) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 13205  | End     | 13681                |
| GI       | none   | Score   | 351                  |
| Exons    | 13205..13591, 13206..13589, 13243..13590, 13606..13680, 13608..13679, 13610..13681 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o7.ts                             | Method  | TBLASTX:Soybean      |
| Start    | 13333  | End     | 13674                |
| GI       | none   | Score   | 78                   |
| Exons    | 13333..13542, 13406..13537, 13561..13674, 13568..13648 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                      | Strand  | -                    |
| Start    | 2891                       | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o6.tm | Method  | TBLASTX:Maize        |
| Start    | 13537                      | End     | 13876                |
| GI       | none                       | Score   | 205                  |
| Exons    | 13537..13875, 13538..13876 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                      | Strand  | -                    |
| Start    | 2891                       | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o5.ts | Method  | TBLASTX:Soybean      |
| Start    | 13687                      | End     | 14032                |
| GI       | none                       | Score   | 126                  |
| Exons    | 13687..14031, 13832..14032 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o3.tw                             | Method  | TBLASTX:Wheat        |
| Start    | 13885  | End     | 14430                |
| GI       | none   | Score   | 48                   |
| Exons    | 13885..14091, 13895..14017, 14086..14430, 14110..14283 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o3.tm                             | Method  | TBLASTX:Maize        |
| Start    | 13966  | End     | 14431                |
| GI       | none   | Score   | 55                   |
| Exons    | 13966..14430, 14069..14179, 14113..14295, 14249..14431 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No.    | 46589  | Strand  | -                    |
| Start       | 2891   | End     | 17653                |
| Name        | OJ990405_02.9922.C18.o4.ts                             | Method  | TBLASTX:Soybean      |
| Start       | 14101  | End     | 14565                |
| GI          | 5509260  | Score   | 58                   |
| Exons       | 14101..14565, 14120..14179, 14252..14347, 14396..14464 |         |                      |
| GI Descrip. | -  |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                      | Strand  | -                    |
| Start    | 2891                       | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o4.tc | Method  | TBLASTX:Cress        |
| Start    | 14212                      | End     | 14472                |
| GI       | none                       | Score   | 62                   |
| Exons    | 14212..14472, 14393..14470 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 14485  | End     | 15240                |
| GI       | none   | Score   | 200                  |
| Exons    | 14485..14724, 14486..14644, 14502..14732, 14505..14702, 14753..15232, 14776..15240 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                      | Strand  | -                    |
| Start    | 2891                       | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o5.tc | Method  | TBLASTX:Cress        |
| Start    | 14866                      | End     | 15255                |
| GI       | none                       | Score   | 112                  |
| Exons    | 14866..15060, 15073..15255 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22382  | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589  | Strand  | -                    |
| Start    | 2891   | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o6.ts                             | Method  | TBLASTX:Soybean      |
| Start    | 14890  | End     | 15288                |
| GI       | none   | Score   | 38                   |
| Exons    | 14890..15063, 15017..15055, 15064..15288, 15110..15280 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22382                      | Seq. ID | OJ990405_02.9922.C18 |
| Gene No. | 46589                      | Strand  | -                    |
| Start    | 2891                       | End     | 17653                |
| Name     | OJ990405_02.9922.C18.o7.tm | Method  | TBLASTX:Maize        |
| Start    | 15076                      | End     | 15510                |
| GI       | none                       | Score   | 84                   |
| Exons    | 15076..15510, 15101..15301 |         |                      |

Seq. No. 22382  
 Gene No. 46589  
 Start 2891  
 Name OJ990405\_02.9922.C18.o6.tw  
 Start 15241  
 GI none  
 Exons 15241..15432, 15241..15432

Seq. ID OJ990405\_02.9922.C18  
 Strand -  
 End 17653  
 Method TBLASTX:Wheat  
 End 15432  
 Score 186

Seq. No. 22382  
 Gene No. 46589  
 Start 2891  
 Name OJ990405\_02.9922.C18.o8.ts  
 Start 15298  
 GI none  
 Exons 15298..15546, 15529..15684

Seq. ID OJ990405\_02.9922.C18  
 Strand -  
 End 17653  
 Method TBLASTX:Soybean  
 End 15684  
 Score 88

Seq. No. 22382  
 Gene No. 46589  
 Start 2891  
 Name OJ990405\_02.9922.C18.o2.tm  
 Start 15711  
 GI none  
 Exons 15711..15878, 15712..16026, 15713..16006, 15779..16033

Seq. ID OJ990405\_02.9922.C18  
 Strand -  
 End 17653  
 Method TBLASTX:Maize  
 End 16033  
 Score 395

Seq. No. 22382  
 Gene No. 46589  
 Start 2891  
 Name OJ990405\_02.9922.C18.o4.tm  
 Start 16532  
 GI none  
 Exons 16532..16837, 16534..16845

Seq. ID OJ990405\_02.9922.C18  
 Strand -  
 End 17653  
 Method TBLASTX:Maize  
 End 16845  
 Score 286

Seq. No. 22382  
 Gene No. 46589  
 Start 2891  
 Name OJ990405\_02.9922.C18.o4.tw  
 Start 16593  
 GI none  
 Exons 16593..16856, 16594..16980, 16595..16969

Seq. ID OJ990405\_02.9922.C18  
 Strand -  
 End 17653  
 Method TBLASTX:Wheat  
 End 16980  
 Score 247

Seq. No. 22383  
 Gene No. 46590  
 Start 6710  
 Name OJ990405\_02.9922.C19.o1.gp  
 Start 6710  
 GI none  
 Exons 6710..7034

Seq. ID OJ990405\_02.9922.C19  
 Strand +  
 End 7034  
 Method AAT/GAP  
 End 7034  
 Score 520

Seq. No. 22383  
 Gene No. 46591  
 Start 13760  
 Name OJ990405\_02.9922.C19.o2.gp  
 Start 13760  
 GI uC-osflcyp033a04b1  
 Exons 13760..14145

Seq. ID OJ990405\_02.9922.C19  
 Strand +  
 End 14145  
 Method AAT/GAP  
 End 14145  
 Score 637

GI Descrip. '6016845/dbj|AP000570.1|AP000570 3.0e-59 Oryza sativa genomic

DNA, chromosome 1, clone:P0711E10'

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22383  | Seq. ID | OJ990405_02.9922.C19 |
| Gene No. | 46592  | Strand  | -                    |
| Start    | 249  | End     | 19795                |
| Name     | OJ990405_02.9922.C19.o1.gs   | Method  | GENSCAN              |
| Start    | 249  | End     | 19626                |
| GI       | none   | Score   | .58                  |
| Exons    | 249..355, 549..660, 839..976, 2408..2452, 4606..4635,<br>4824..4875, 6975..7032, 7681..7807, 8964..9026, 9975..10034,<br>10116..10319, 10419..10475, 10586..10604, 10872..11038,<br>12357..12879, 13664..13802, 15754..15980, 16038..16220,<br>17136..17253, 17884..18087, 18206..18347, 18445..18654,<br>19537..19626 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22383   | Seq. ID | OJ990405_02.9922.C19 |
| Gene No.    | 46592   | Strand  | -                    |
| Start       | 249   | End     | 19795                |
| Name        | OJ990405_02.9922.C19.o1.np                                      | Method  | AAT/NAP              |
| Start       | 5165  | End     | 10499                |
| GI          | 4337178   | Score   | 545                  |
| Exons       | 5165..5295, 7633..7807, 9975..10034, 10116..10319, 10419..10499 |         |                      |
| GI Descrip. | (AC006416) T31J12.5 [Arabidopsis thaliana]                      |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22383   | Seq. ID | OJ990405_02.9922.C19 |
| Gene No.    | 46592   | Strand  | -                    |
| Start       | 249   | End     | 19795                |
| Name        | OJ990405_02.9922.C19.o2.np  | Method  | AAT/NAP              |
| Start       | 5827  | End     | 18310                |
| GI          | 5852180   | Score   | 656                  |
| Exons       | 5827..5876, 11607..11720, 12423..12832, 12884..13001,<br>13994..14040, 18262..18310 |         |                      |
| GI Descrip. | (AL117265) zhb00010.1 [Oryza sativa]  |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22383   | Seq. ID | OJ990405_02.9922.C19 |
| Gene No. | 46592   | Strand  | -                    |
| Start    | 249   | End     | 19795                |
| Name     | OJ990405_02.9922.C19.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 6944  | End     | 10479                |
| GI       | none  | Score   | 73                   |
| Exons    | 6944..7033, 6948..7034, 7675..7803, 7675..7803, 7682..7807,<br>7683..7808, 9969..10037, 9976..10035, 10098..10229,<br>10117..10320, 10117..10323, 10182..10322, 10398..10478,<br>10402..10479 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22383  | Seq. ID | OJ990405_02.9922.C19 |
| Gene No. | 46592  | Strand  | -                    |
| Start    | 249  | End     | 19795                |
| Name     | OJ990405_02.9922.C19.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 7674   | End     | 10478                |
| GI       | none   | Score   | 162                  |
| Exons    | 7674..7808, 7678..7809, 7682..7807, 9975..10037, 9976..10035,<br>10098..10229, 10105..10320, 10105..10323, 10398..10478,<br>10402..10473 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22383 | Seq. ID | OJ990405_02.9922.C19 |
| Gene No. | 46592 | Strand  | -                    |

|       |   |        |               |
|-------|---|--------|---------------|
| Start | 249   | End    | 19795         |
| Name  | OJ990405_02.9922.C19.o1.tc  | Method | TBLASTX:Cress |
| Start | 7703  | End    | 10481         |
| GI    | none  | Score  | 46            |
| Exons | 7703..7789, 7707..7760, 7757..7813, 7757..7807, 9969..10037, 9978..10037, 9988..10053, 10098..10322, 10105..10314, 10256..10321, 10398..10481, 10401..10463, 10402..10479 |        |               |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22383   | Seq. ID | OJ990405_02.9922.C19 |
| Gene No.    | 46592   | Strand  | -                    |
| Start       | 249   | End     | 19795                |
| Name        | OJ990405_02.9922.C19.o3.np                              | Method  | AAT/NAP              |
| Start       | 17033   | End     | 19795                |
| GI          | 4680183   | Score   | 135                  |
| Exons       | 17033..17124, 17727..17795, 19756..19795                |         |                      |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22384                      | Seq. ID | OJ990405_02.9922.C20 |
| Gene No. | 46593                      | Strand  | +                    |
| Start    | 315                        | End     | 1287                 |
| Name     | OJ990405_02.9922.C20.o1.gs | Method  | GENSCAN              |
| Start    | 315                        | End     | 1287                 |
| GI       | none                       | Score   | .5                   |
| Exons    | 315..410, 1183..1287       |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22384  | Seq. ID | OJ990405_02.9922.C20 |
| Gene No. | 46594  | Strand  | -                    |
| Start    | 2887   | End     | 3537                 |
| Name     | OJ990405_02.9922.C20.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1218   | End     | 1607                 |
| GI       | none   | Score   | 195                  |
| Exons    | 1218..1430, 1262..1402, 1278..1427, 1422..1481, 1491..1607, 1496..1597 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22384  | Seq. ID | OJ990405_02.9922.C20 |
| Gene No. | 46594  | Strand  | -                    |
| Start    | 2887   | End     | 3537                 |
| Name     | OJ990405_02.9922.C20.o2.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 1256   | End     | 1607                 |
| GI       | none   | Score   | 317                  |
| Exons    | 1256..1513, 1266..1550, 1278..1550, 1554..1607 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22384                      | Seq. ID | OJ990405_02.9922.C20 |
| Gene No. | 46594                      | Strand  | -                    |
| Start    | 2887                       | End     | 3537                 |
| Name     | OJ990405_02.9922.C20.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 1843                       | End     | 2172                 |
| GI       | none                       | Score   | 236                  |
| Exons    | 1843..2172                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22384                      | Seq. ID | OJ990405_02.9922.C20 |
| Gene No. | 46594                      | Strand  | -                    |
| Start    | 2887                       | End     | 3537                 |
| Name     | OJ990405_02.9922.C20.o2.gs | Method  | GENSCAN              |
| Start    | 2887                       | End     | 3297                 |
| GI       | none                       | Score   | .99                  |
| Exons    | 2887..3297                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22384  | Seq. ID | OJ990405_02.9922.C20 |
| Gene No.    | 46594  | Strand  | -                    |
| Start       | 2887   | End     | 3537                 |
| Name        | OJ990405_02.9922.C20.o2.np                     | Method  | AAT/NAP              |
| Start       | 2908   | End     | 3537                 |
| GI          | 4680203  | Score   | 495                  |
| Exons       | 2908..3537                                     |         |                      |
| GI Descrip. | (AF114171) TNP2-like protein [Sorghum bicolor] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22384  | Seq. ID | OJ990405_02.9922.C20 |
| Gene No. | 46594  | Strand  | -                    |
| Start    | 2887   | End     | 3537                 |
| Name     | OJ990405_02.9922.C20.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 2930   | End     | 3537                 |
| GI       | none   | Score   | 47                   |
| Exons    | 2930..3028, 2962..3054, 2964..3050, 3058..3123, 3059..3124, 3128..3208, 3131..3250, 3148..3249, 3256..3312, 3266..3319, 3288..3320, 3321..3386, 3325..3363, 3326..3367, 3376..3525, 3377..3520, 3394..3537 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22385                                  | Seq. ID | OJ990405_02.9922.C21 |
| Gene No.    | 46595                                  | Strand  | -                    |
| Start       | 1                                      | End     | 2330                 |
| Name        | OJ990405_02.9922.C21.o1.np             | Method  | AAT/NAP              |
| Start       | 1                                      | End     | 1754                 |
| GI          | 6742729                                | Score   | 2422                 |
| Exons       | 1..1754                                |         |                      |
| GI Descrip. | (AF121139) RIM2 protein [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22385  | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46595  | Strand  | -                    |
| Start    | 1  | End     | 2330                 |
| Name     | OJ990405_02.9922.C21.o1.gs                             | Method  | GENSCAN              |
| Start    | 106  | End     | 2330                 |
| GI       | none   | Score   | .46                  |
| Exons    | 106..576, 679..857, 1363..1619, 1678..2040, 2164..2330 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22385                              | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46596                              | Strand  | -                    |
| Start    | 2238                               | End     | 3393                 |
| Name     | OJ990405_02.9922.C21.o1.tc         | Method  | TBLASTX:Cress        |
| Start    | 58                                 | End     | 367                  |
| GI       | none                               | Score   | 100                  |
| Exons    | 58..363, 61..363, 62..367, 65..367 |         |                      |

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 22385                                | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46596                                | Strand  | -                    |
| Start    | 2238                                 | End     | 3393                 |
| Name     | OJ990405_02.9922.C21.o1.tw           | Method  | TBLASTX:Wheat        |
| Start    | 61                                   | End     | 660                  |
| GI       | none                                 | Score   | 489                  |
| Exons    | 61..654, 62..655, 187..660, 488..655 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22385 | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46596 | Strand  | -                    |
| Start    | 2238  | End     | 3393                 |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Name     | OJ990405_02.9922.C21.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 298  | End     | 612                  |
| GI       | none   | Score   | 128                  |
| Exons    | 298..612, 326..601   |         |                      |
|          |  |         |                      |
| Seq. No. | 22385  | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46596  | Strand  | -                    |
| Start    | 2238   | End     | 3393                 |
| Name     | OJ990405_02.9922.C21.o4.tw   | Method  | TBLASTX:Wheat        |
| Start    | 664  | End     | 1063                 |
| GI       | none   | Score   | 43                   |
| Exons    | 664..741, 667..747, 775..969, 775..969, 967..990, 1019..1063   |         |                      |
|          |  |         |                      |
| Seq. No. | 22385  | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46596  | Strand  | -                    |
| Start    | 2238   | End     | 3393                 |
| Name     | OJ990405_02.9922.C21.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 1169   | End     | 1612                 |
| GI       | none   | Score   | 96                   |
| Exons    | 1169..1258, 1373..1612, 1373..1609   |         |                      |
|          |  |         |                      |
| Seq. No. | 22385  | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46596  | Strand  | -                    |
| Start    | 2238   | End     | 3393                 |
| Name     | OJ990405_02.9922.C21.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 1206   | End     | 1600                 |
| GI       | none   | Score   | 145                  |
| Exons    | 1206..1409, 1206..1412, 1207..1410, 1208..1432, 1410..1502, 1412..1510, 1413..1505, 1514..1600, 1518..1598 |         |                      |
|          |  |         |                      |
| Seq. No. | 22385  | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46596  | Strand  | -                    |
| Start    | 2238   | End     | 3393                 |
| Name     | OJ990405_02.9922.C21.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 1460   | End     | 1775                 |
| GI       | none   | Score   | 64                   |
| Exons    | 1460..1600, 1479..1598, 1605..1775   |         |                      |
|          |  |         |                      |
| Seq. No. | 22385  | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46596  | Strand  | -                    |
| Start    | 2238   | End     | 3393                 |
| Name     | OJ990405_02.9922.C21.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1803   | End     | 2132                 |
| GI       | none   | Score   | 86                   |
| Exons    | 1803..1868, 1875..2093, 1879..2055, 2103..2132   |         |                      |
|          |  |         |                      |
| Seq. No. | 22385  | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46596  | Strand  | -                    |
| Start    | 2238   | End     | 3393                 |
| Name     | OJ990405_02.9922.C21.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 1875   | End     | 2210                 |
| GI       | none   | Score   | 194                  |
| Exons    | 1875..2117, 1876..2118, 1901..2125, 2109..2210   |         |                      |
|          |  |         |                      |
| Seq. No. | 22385  | Seq. ID | OJ990405_02.9922.C21 |
| Gene No. | 46596  | Strand  | -                    |
| Start    | 2238   | End     | 3393                 |

|             |                                     |        |         |
|-------------|-------------------------------------|--------|---------|
| Name        | OJ990405_02.9922.C21.o2.np          | Method | AAT/NAP |
| Start       | 2238                                | End    | 3393    |
| GI          | 5852182                             | Score  | 338     |
| Exons       | 2238..2566, 3257..3393              |        |         |
| GI Descrip. | (AL117265) zhb0012.1 [Oryza sativa] |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22386                      | Seq. ID | OJ990405_02.9922.C22 |
| Gene No. | 46597                      | Strand  | +                    |
| Start    | 596                        | End     | 785                  |
| Name     | OJ990405_02.9922.C22.o1.gs | Method  | GENSCAN              |
| Start    | 596                        | End     | 785                  |
| GI       | none                       | Score   | .81                  |
| Exons    | 596..785                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22386  | Seq. ID | OJ990405_02.9922.C22 |
| Gene No. | 46598  | Strand  | -                    |
| Start    | 3114   | End     | 4902                 |
| Name     | OJ990405_02.9922.C22.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3111   | End     | 4582                 |
| GI       | none   | Score   | 151                  |
| Exons    | 3111..3347, 3124..3348, 3471..3644, 3493..3564, 3663..3749, 3664..3750, 4310..4384, 4326..4379, 4403..4537, 4404..4538, 4538..4582 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22386                              | Seq. ID | OJ990405_02.9922.C22 |
| Gene No. | 46598                              | Strand  | -                    |
| Start    | 3114                               | End     | 4902                 |
| Name     | OJ990405_02.9922.C22.o2.gs         | Method  | GENSCAN              |
| Start    | 3114                               | End     | 4570                 |
| GI       | none                               | Score   | .88                  |
| Exons    | 3114..3346, 3473..3743, 4232..4570 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22386  | Seq. ID | OJ990405_02.9922.C22 |
| Gene No.    | 46598  | Strand  | -                    |
| Start       | 3114   | End     | 4902                 |
| Name        | OJ990405_02.9922.C22.o1.np                                       | Method  | AAT/NAP              |
| Start       | 3117   | End     | 4902                 |
| GI          | 3482914  | Score   | 682                  |
| Exons       | 3117..3346, 3473..3743, 4232..4584, 4843..4902                   |         |                      |
| GI Descrip. | (AC003970) Similar to nodulins and lipase [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22386  | Seq. ID | OJ990405_02.9922.C22 |
| Gene No. | 46598  | Strand  | -                    |
| Start    | 3114   | End     | 4902                 |
| Name     | OJ990405_02.9922.C22.o2.tm                     | Method  | TBLASTX:Maize        |
| Start    | 3240   | End     | 3758                 |
| GI       | none   | Score   | 84                   |
| Exons    | 3240..3347, 3241..3348, 3471..3758, 3472..3750 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22386                              | Seq. ID | OJ990405_02.9922.C22 |
| Gene No. | 46598                              | Strand  | -                    |
| Start    | 3114                               | End     | 4902                 |
| Name     | OJ990405_02.9922.C22.o1.tw         | Method  | TBLASTX:Wheat        |
| Start    | 3600                               | End     | 4387                 |
| GI       | none                               | Score   | 113                  |
| Exons    | 3600..3758, 3601..3729, 4319..4387 |         |                      |



|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22386  | Seq. ID | OJ990405_02.9922.C22 |
| Gene No.    | 46598  | Strand  | -                    |
| Start       | 3114   | End     | 4902                 |
| Name        | OJ990405_02.9922.C22.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 4229   | End     | 4591                 |
| GI          | none   | Score   | 282                  |
| Exons       | 4229..4321, 4304..4591, 4305..4589   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22387  | Seq. ID | OJ990405_02.9922.C23 |
| Gene No.    | 46599  | Strand  | -                    |
| Start       | 314  | End     | 453                  |
| Name        | OJ990405_02.9922.C23.o1.gs   | Method  | GENSCAN              |
| Start       | 314  | End     | 453                  |
| GI          | none   | Score   | .72                  |
| Exons       | 314..453   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22388  | Seq. ID | OJ990405_02.9922.C24 |
| Gene No.    | 46600  | Strand  | +                    |
| Start       | 3391   | End     | 4749                 |
| Name        | OJ990405_02.9922.C24.o2.gs   | Method  | GENSCAN              |
| Start       | 3391   | End     | 4749                 |
| GI          | none   | Score   | .62                  |
| Exons       | 3391..3563, 3630..3770, 3918..4006, 4556..4749   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22388  | Seq. ID | OJ990405_02.9922.C24 |
| Gene No.    | 46601  | Strand  | -                    |
| Start       | 218  | End     | 4746                 |
| Name        | OJ990405_02.9922.C24.o1.np   | Method  | AAT/NAP              |
| Start       | 218  | End     | 2589                 |
| GI          | 3482914  | Score   | 153                  |
| Exons       | 218..244, 1941..2257, 2520..2589   |         |                      |
| GI Descrip. | (AC003970) Similar to nodulins and lipase [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22388  | Seq. ID | OJ990405_02.9922.C24 |
| Gene No.    | 46601  | Strand  | -                    |
| Start       | 218  | End     | 4746                 |
| Name        | OJ990405_02.9922.C24.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 2064   | End     | 2220                 |
| GI          | none   | Score   | 77                   |
| Exons       | 2064..2219, 2161..2220   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22388  | Seq. ID | OJ990405_02.9922.C24 |
| Gene No.    | 46601  | Strand  | -                    |
| Start       | 218  | End     | 4746                 |
| Name        | OJ990405_02.9922.C24.o2.np   | Method  | AAT/NAP              |
| Start       | 2307   | End     | 4746                 |
| GI          | 5922623  | Score   | 412                  |
| Exons       | 2307..2461, 3911..3986, 4154..4301, 4666..4746   |         |                      |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6016856 dbj BAA85199.1  (AP000570) hypothetical protein<br>[Oryza sativa] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22389  | Seq. ID | OJ990405_02.9922.C25 |
| Gene No.    | 46602  | Strand  | +                    |
| Start       | 1  | End     | 665                  |
| Name        | OJ990405_02.9922.C25.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 665                  |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| GI          | 2244867  | Score   | 106                  |
| Exons       | 1..80, 403..511, 602..665  |         |                      |
| GI Descrip. | (Z97337) hydroxynitrile lyase like protein [Arabidopsis thaliana]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22389  | Seq. ID | OJ990405_02.9922.C25 |
| Gene No.    | 46602  | Strand  | +                    |
| Start       | 1  | End     | 665                  |
| Name        | OJ990405_02.9922.C25.ol.gp   | Method  | AAT/GAP              |
| Start       | 49   | End     | 511                  |
| GI          | 4736_1.R1084   | Score   | 211                  |
| Exons       | 49..80, 403..511   |         |                      |
| GI Descrip. | '2244867/emb CAB10289.1  4.0e-58 (Z97337) hydroxynitrile lyase like protein [Arabidopsis thaliana]'                                  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22389  | Seq. ID | OJ990405_02.9922.C25 |
| Gene No.    | 46602  | Strand  | +                    |
| Start       | 1  | End     | 665                  |
| Name        | OJ990405_02.9922.C25.ol.ts   | Method  | TBLASTX:Soybean      |
| Start       | 347  | End     | 511                  |
| GI          | none   | Score   | 176                  |
| Exons       | 347..511, 355..510   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22390  | Seq. ID | OJ990405_02.9922.C26 |
| Gene No.    | 46603  | Strand  | -                    |
| Start       | 104  | End     | 647                  |
| Name        | OJ990405_02.9922.C26.ol.gs   | Method  | GENSCAN              |
| Start       | 104  | End     | 647                  |
| GI          | none   | Score   | .92                  |
| Exons       | 104..552, 615..647   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22391  | Seq. ID | OJ990715_02.9922.C2  |
| Gene No.    | 46604  | Strand  | +                    |
| Start       | 8687   | End     | 13448                |
| Name        | OJ990715_02.9922.C2.o4.gp  | Method  | AAT/GAP              |
| Start       | 8687   | End     | 13448                |
| GI          | LIB3477-003-P1-K1-E9   | Score   | 159                  |
| Exons       | 8687..8752, 13391..13448   |         |                      |
| GI Descrip. | '2498586/sp Q40638 MP01_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY S 1 PRECURSOR (ORY S I) >gi_1173557 (U31771) Ory s 1 [Oryza sativa]' |         |                      |
|             |  |         |                      |
| Seq. No.    | 22391  | Seq. ID | OJ990715_02.9922.C2  |
| Gene No.    | 46605  | Strand  | -                    |
| Start       | 351  | End     | 1214                 |
| Name        | OJ990715_02.9922.C2.ol.gs  | Method  | GENSCAN              |
| Start       | 351  | End     | 1214                 |
| GI          | none   | Score   | .82                  |
| Exons       | 351..726, 810..1214  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22391  | Seq. ID | OJ990715_02.9922.C2  |
| Gene No.    | 46606  | Strand  | -                    |
| Start       | 2825   | End     | 12599                |
| Name        | OJ990715_02.9922.C2.ol.gp  | Method  | AAT/GAP              |
| Start       | 2825   | End     | 3250                 |
| GI          | LIB3479-006-Q6-K1-B11  | Score   | 592                  |
| Exons       | 2825..3250   |         |                      |

GI Descrip. '5734616/dbj|AP000391.1|AP000391 1.0e-110 Oryza sativa genomic DNA, chromosome 6, clone:P0538C01'

Seq. No. 22391 Seq. ID OJ990715\_02.9922.C2  
Gene No. 46606 Strand -  
Start 2825 End 12599  
Name OJ990715\_02.9922.C2.o2.gs Method GENSCAN  
Start 3043 End 12584  
GI none Score .51  
Exons 3043..3156, 6583..6851, 7322..7510, 8908..9070, 9342..9414, 9499..9609, 9706..9879, 9989..10674, 10676..10821, 10947..11088, 11163..12584

Seq. No. 22391 Seq. ID OJ990715\_02.9922.C2  
Gene No. 46606 Strand -  
Start 2825 End 12599  
Name OJ990715\_02.9922.C2.o1.tm Method TBLASTX:Maize  
Start 5891 End 6199  
GI none Score 331  
Exons 5891..6199, 5892..6179, 5893..6198

Seq. No. 22391 Seq. ID OJ990715\_02.9922.C2  
Gene No. 46606 Strand -  
Start 2825 End 12599  
Name OJ990715\_02.9922.C2.o2.tw Method TBLASTX:Wheat  
Start 6001 End 6240  
GI none Score 84  
Exons 6001..6240, 6005..6232

Seq. No. 22391 Seq. ID OJ990715\_02.9922.C2  
Gene No. 46606 Strand -  
Start 2825 End 12599  
Name OJ990715\_02.9922.C2.o1.np Method AAT/NAP  
Start 6664 End 12599  
GI 4680204 Score 1048  
Exons 6664..6701, 8941..9040, 9390..9609, 9706..9879, 9989..11088, 11163..12599

GI Descrip. (AF114171) hypothetical protein [Sorghum bicolor]

Seq. No. 22391 Seq. ID OJ990715\_02.9922.C2  
Gene No. 46606 Strand -  
Start 2825 End 12599  
Name OJ990715\_02.9922.C2.o2.gp Method AAT/GAP  
Start 7212 End 7678  
GI LIB3432-044-P1-K1-F5 Score 848  
Exons 7212..7678

GI Descrip. '4959460/gb|AF126053.1|AF126053 6.0e-10 Zea mays RACB small GTP binding protein mRNA, complete cds'

Seq. No. 22391 Seq. ID OJ990715\_02.9922.C2  
Gene No. 46606 Strand -  
Start 2825 End 12599  
Name OJ990715\_02.9922.C2.o3.gp Method AAT/GAP  
Start 8484 End 8625  
GI 21474\_1.R1084 Score 237  
Exons 8484..8625

GI Descrip. '3894159 2.0e-10 (AC005312) hypothetical protein [Arabidopsis

thaliana]'

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22391   | Seq. ID | OJ990715_02.9922.C2 |
| Gene No. | 46606   | Strand  | -                   |
| Start    | 2825  | End     | 12599               |
| Name     | OJ990715_02.9922.C2.o3.tw                       | Method  | TBLASTX:Wheat       |
| Start    | 9540  | End     | 10062               |
| GI       | none  | Score   | 68                  |
| Exons    | 9540..9611, 9711..9893, 9718..9843, 9982..10062 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22391  | Seq. ID | OJ990715_02.9922.C2 |
| Gene No. | 46606  | Strand  | -                   |
| Start    | 2825   | End     | 12599               |
| Name     | OJ990715_02.9922.C2.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 11553  | End     | 11956               |
| GI       | none   | Score   | 45                  |
| Exons    | 11553..11648, 11553..11723, 11686..11853, 11718..11954, 11805..11954, 11846..11956 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22392   | Seq. ID | OJ990715_02.9922.C3 |
| Gene No.    | 46607   | Strand  | -                   |
| Start       | 1   | End     | 408                 |
| Name        | OJ990715_02.9922.C3.o1.gp   | Method  | AAT/GAP             |
| Start       | 1   | End     | 408                 |
| GI          | 342_1.R1084   | Score   | 697                 |
| Exons       | 1..408  |         |                     |
| GI Descrip. | '4574406/gb AAD24042.1  0.0e+00 (AF121139) RIM2 protein [Oryza sativa]' |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22392   | Seq. ID | OJ990715_02.9922.C3 |
| Gene No. | 46607   | Strand  | -                   |
| Start    | 1   | End     | 408                 |
| Name     | OJ990715_02.9922.C3.o1.tw   | Method  | TBLASTX:Wheat       |
| Start    | 1   | End     | 407                 |
| GI       | none  | Score   | 122                 |
| Exons    | 1..126, 2..127, 74..169, 106..165, 172..216, 177..212, 211..405, 227..370, 243..407 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22392  | Seq. ID | OJ990715_02.9922.C3 |
| Gene No.    | 46607  | Strand  | -                   |
| Start       | 1  | End     | 408                 |
| Name        | OJ990715_02.9922.C3.o1.np                      | Method  | AAT/NAP             |
| Start       | 1  | End     | 408                 |
| GI          | 4680203  | Score   | 441                 |
| Exons       | 1..408   |         |                     |
| GI Descrip. | (AF114171) TNP2-like protein [Sorghum bicolor] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22392                     | Seq. ID | OJ990715_02.9922.C3 |
| Gene No. | 46607                     | Strand  | -                   |
| Start    | 1                         | End     | 408                 |
| Name     | OJ990715_02.9922.C3.o1.gs | Method  | GENSCAN             |
| Start    | 73                        | End     | 402                 |
| GI       | none                      | Score   | .6                  |
| Exons    | 73..402                   |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22393 | Seq. ID | OJ990715_02.9922.C5 |
| Gene No. | 46608 | Strand  | +                   |

Start 1024 End 7677  
 Name OJ990715\_02.9922.C5.o1.gs Method GENSCAN  
 Start 1024 End 4800  
 GI none Score .86  
 Exons 1024..1180, 1335..1674, 2157..2222, 2816..2930, 3089..3283,  
 3379..3751, 4693..4800

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
 Gene No. 46608 Strand +  
 Start 1024 End 7677  
 Name OJ990715\_02.9922.C5.o1.np Method AAT/NAP  
 Start 1323 End 6223  
 GI 3550985 Score 539  
 Exons 1323..1448, 1569..1674, 2816..2930, 3089..3273, 3366..3626,  
 6195..6223  
 GI Descrip. (AB010740) OsS5a [Oryza sativa]

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
 Gene No. 46608 Strand +  
 Start 1024 End 7677  
 Name OJ990715\_02.9922.C5.o2.np Method AAT/NAP  
 Start 5283 End 7677  
 GI 2864615 Score 96  
 Exons 5283..5327, 7433..7677  
 GI Descrip. (AL021811) putative protein [Arabidopsis thaliana]

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
 Gene No. 46609 Strand +  
 Start 21040 End 23335  
 Name OJ990715\_02.9922.C5.o4.np Method AAT/NAP  
 Start 21040 End 23335  
 GI 2947070 Score 112  
 Exons 21040..21300, 23261..23335  
 GI Descrip. (AC002521) putative receptor-like protein kinase [Arabidopsis thaliana]

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
 Gene No. 46610 Strand +  
 Start 28163 End 35570  
 Name OJ990715\_02.9922.C5.o6.gs Method GENSCAN  
 Start 28163 End 34557  
 GI none Score .45  
 Exons 28163..28268, 30771..30899, 30994..31288, 32324..32407,  
 32456..32632, 32957..33182, 33653..33761, 34415..34557

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
 Gene No. 46610 Strand +  
 Start 28163 End 35570  
 Name OJ990715\_02.9922.C5.o6.np Method AAT/NAP  
 Start 32456 End 35349  
 GI 5922620 Score 494  
 Exons 32456..32639, 33403..33839, 35242..35349  
 GI Descrip. (AP000492) EST D15357(C0514) corresponds to a region of the  
 predicted gene.; hypothetical protein [Oryza sativa]  
 gi|6016853|dbj|BAA85196.1| (AP000570) EST D15357(C0514)  
 corresponds to a region of the predicted gene.; hypothetical  
 protein [Oryza sativa]

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22393                      | Seq. ID | OJ990715_02.9922.C5 |
| Gene No. | 46610                      | Strand  | +                   |
| Start    | 28163                      | End     | 35570               |
| Name     | OJ990715_02.9922.C5.o7.gs  | Method  | GENSCAN             |
| Start    | 35047                      | End     | 35570               |
| GI       | none                       | Score   | .57                 |
| Exons    | 35047..35237, 35495..35570 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22393                     | Seq. ID | OJ990715_02.9922.C5 |
| Gene No. | 46611                     | Strand  | -                   |
| Start    | 7490                      | End     | 8721                |
| Name     | OJ990715_02.9922.C5.o2.gs | Method  | GENSCAN             |
| Start    | 7490                      | End     | 8721                |
| GI       | none                      | Score   | .62                 |
| Exons    | 7490..7713, 8283..8721    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22393  | Seq. ID | OJ990715_02.9922.C5 |
| Gene No. | 46612  | Strand  | -                   |
| Start    | 11535  | End     | 16999               |
| Name     | OJ990715_02.9922.C5.o3.gs                              | Method  | GENSCAN             |
| Start    | 11535  | End     | 14727               |
| GI       | none   | Score   | .63                 |
| Exons    | 11535..11671, 12506..13499, 13721..13963, 14083..14727 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22393   | Seq. ID | OJ990715_02.9922.C5 |
| Gene No.    | 46612   | Strand  | -                   |
| Start       | 11535   | End     | 16999               |
| Name        | OJ990715_02.9922.C5.o3.np                                 | Method  | AAT/NAP             |
| Start       | 12511   | End     | 16999               |
| GI          | 6665543   | Score   | 349                 |
| Exons       | 12511..12644, 13748..14105, 14151..14577, 16971..16999    |         |                     |
| GI Descrip. | (AC013289) putative protein kinase [Arabidopsis thaliana] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22393  | Seq. ID | OJ990715_02.9922.C5 |
| Gene No.    | 46613  | Strand  | -                   |
| Start       | 19721  | End     | 19884               |
| Name        | OJ990715_02.9922.C5.o2.gp  | Method  | AAT/GAP             |
| Start       | 19721  | End     | 19884               |
| GI          | 21474_1.R1084  | Score   | 241                 |
| Exons       | 19721..19884   |         |                     |
| GI Descrip. | '3894159 2.0e-10 (AC005312) hypothetical protein [Arabidopsis thaliana]' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22393  | Seq. ID | OJ990715_02.9922.C5 |
| Gene No.    | 46614  | Strand  | -                   |
| Start       | 21330  | End     | 21713               |
| Name        | OJ990715_02.9922.C5.o5.np                              | Method  | AAT/NAP             |
| Start       | 21330  | End     | 21713               |
| GI          | 6899896  | Score   | 111                 |
| Exons       | 21330..21592, 21627..21713                             |         |                     |
| GI Descrip. | (AL138642) hypothetical protein [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22393                     | Seq. ID | OJ990715_02.9922.C5 |
| Gene No. | 46615                     | Strand  | -                   |
| Start    | 33609                     | End     | 38349               |
| Name     | OJ990715_02.9922.C5.o1.tw | Method  | TBLASTX:Wheat       |

|       |  |       |      |
|-------|--|-------|------|
| Start | 1329   | End   | 3736 |
| GI    | none   | Score | 146  |
| Exons | 1329..1442, 1337..1444, 1566..1676, 1566..1673, 1568..1678, 2809..2928, 2809..2928, 3108..3230, 3110..3151, 3111..3227, 3208..3237, 3227..3295, 3228..3260, 3377..3403, 3393..3473, 3410..3478, 3436..3495, 3437..3496, 3511..3591, 3515..3607, 3689..3736 |       |      |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22393  | Seq. ID | OJ990715_02.9922.C5 |
| Gene No. | 46615  | Strand  | -                   |
| Start    | 33609  | End     | 38349               |
| Name     | OJ990715_02.9922.C5.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 1329   | End     | 3779                |
| GI       | none   | Score   | 149                 |
| Exons    | 1329..1442, 1334..1444, 1566..1676, 1566..1673, 1568..1675, 2809..2928, 2809..2928, 3099..3227, 3108..3230, 3227..3268, 3228..3263, 3377..3403, 3422..3478, 3431..3496, 3448..3495, 3511..3591, 3515..3607, 3689..3742, 3690..3779 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22393  | Seq. ID | OJ990715_02.9922.C5 |
| Gene No. | 46615  | Strand  | -                   |
| Start    | 33609  | End     | 38349               |
| Name     | OJ990715_02.9922.C5.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 8274   | End     | 14628               |
| GI       | none   | Score   | 68                  |
| Exons    | 8274..8351, 8327..8413, 8329..8481, 8330..8509, 8497..8622, 8498..8623, 13065..13235, 13233..13391, 13416..13532, 14161..14337, 14165..14338, 14166..14342, 14341..14478, 14357..14419, 14360..14485, 14491..14628, 14510..14575 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22393  | Seq. ID | OJ990715_02.9922.C5 |
| Gene No. | 46615  | Strand  | -                   |
| Start    | 33609  | End     | 38349               |
| Name     | OJ990715_02.9922.C5.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 8323   | End     | 14646               |
| GI       | none   | Score   | 72                  |
| Exons    | 8323..8517, 8476..8580, 12879..12974, 13248..13400, 13249..13341, 13751..13912, 13770..13880, 13964..14029, 13986..14021, 14047..14139, 14142..14219, 14149..14250, 14341..14490, 14506..14577, 14554..14646 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22393  | Seq. ID | OJ990715_02.9922.C5 |
| Gene No. | 46615  | Strand  | -                   |
| Start    | 33609  | End     | 38349               |
| Name     | OJ990715_02.9922.C5.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 8326   | End     | 14592               |
| GI       | none   | Score   | 58                  |
| Exons    | 8326..8586, 8333..8413, 8471..8569, 13231..13407, 13248..13388, 13959..14018, 13961..14026, 13961..14035, 13986..14027, 14047..14139, 14054..14137, 14140..14250, 14144..14251, 14176..14253, 14341..14592 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22393                     | Seq. ID | OJ990715_02.9922.C5 |
| Gene No. | 46615                     | Strand  | -                   |
| Start    | 33609                     | End     | 38349               |
| Name     | OJ990715_02.9922.C5.o5.tm | Method  | TBLASTX:Maize       |
| Start    | 12903                     | End     | 14033               |

GI none Score 103  
Exons 12903..12962, 13744..13935, 13745..13945, 13746..13940, 13964..14032, 13964..14032, 13989..14033

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
Gene No. 46615 Strand -  
Start 33609 End 38349  
Name OJ990715\_02.9922.C5.o4.tm Method TBLASTX:Maize  
Start 21121 End 21333  
GI none Score 222  
Exons 21121..21333, 21130..21330

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
Gene No. 46615 Strand -  
Start 33609 End 38349  
Name OJ990715\_02.9922.C5.o8.np Method AAT/NAP  
Start 33609 End 37199  
GI 6721103 Score 314  
Exons 33609..33636, 36069..36242, 36609..37199  
GI Descrip. (AC007396) T4012.11 [Arabidopsis thaliana]

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
Gene No. 46615 Strand -  
Start 33609 End 38349  
Name OJ990715\_02.9922.C5.o9.np Method AAT/NAP  
Start 35197 End 38349  
GI 5734709 Score 145  
Exons 35197..35238, 36742..37027, 37993..38151, 38200..38349  
GI Descrip. (AC008075) Contains PF|00069 Eukaryotic protein kinase domain. [Arabidopsis thaliana]

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
Gene No. 46615 Strand -  
Start 33609 End 38349  
Name OJ990715\_02.9922.C5.o7.np Method AAT/NAP  
Start 35489 End 36833  
GI 6630699 Score 80  
Exons 35489..35565, 36731..36833  
GI Descrip. (AP000969) hypothetical protein [Oryza sativa]  
gi|6721536|dbj|BAA89566.1| (AP001073) hypothetical protein [Oryza sativa]

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
Gene No. 46615 Strand -  
Start 33609 End 38349  
Name OJ990715\_02.9922.C5.o8.gs Method GENSCAN  
Start 36055 End 37985  
GI none Score .69  
Exons 36055..36242, 36609..37421, 37769..37985

Seq. No. 22393 Seq. ID OJ990715\_02.9922.C5  
Gene No. 46615 Strand -  
Start 33609 End 38349  
Name OJ990715\_02.9922.C5.o3.tm Method TBLASTX:Maize  
Start 36955 End 37207  
GI none Score 68  
Exons 36955..36996, 37003..37059, 37018..37110, 37063..37200,



37073..37207, 37127..37204

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22394   | Seq. ID | OJ990715_02.9922.C6 |
| Gene No.    | 46616   | Strand  | +                   |
| Start       | 1   | End     | 659                 |
| Name        | OJ990715_02.9922.C6.o1.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 659                 |
| GI          | 6907106   | Score   | 366                 |
| Exons       | 1..81, 232..401, 436..659   |         |                     |
| GI Descrip. | (AP001129) EST AU068291(C12960) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22394  | Seq. ID | OJ990715_02.9922.C6 |
| Gene No. | 46617  | Strand  | +                   |
| Start    | 19183  | End     | 20725               |
| Name     | OJ990715_02.9922.C6.o5.gs                              | Method  | GENSCAN             |
| Start    | 19183  | End     | 20725               |
| GI       | none   | Score   | .41                 |
| Exons    | 19183..19292, 19585..19697, 20158..20215, 20596..20725 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22394  | Seq. ID | OJ990715_02.9922.C6 |
| Gene No.    | 46618  | Strand  | +                   |
| Start       | 21608  | End     | 23023               |
| Name        | OJ990715_02.9922.C6.o5.np                          | Method  | AAT/NAP             |
| Start       | 21457  | End     | 21901               |
| GI          | 5262765  | Score   | 159                 |
| Exons       | 21457..21901                                       |         |                     |
| GI Descrip. | (AL080283) putative protein [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22394  | Seq. ID | OJ990715_02.9922.C6 |
| Gene No. | 46618  | Strand  | +                   |
| Start    | 21608  | End     | 23023               |
| Name     | OJ990715_02.9922.C6.o6.gs                              | Method  | GENSCAN             |
| Start    | 21608  | End     | 23023               |
| GI       | none   | Score   | .52                 |
| Exons    | 21608..22145, 22193..22451, 22567..22621, 22934..23023 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22394  | Seq. ID | OJ990715_02.9922.C6 |
| Gene No.    | 46619  | Strand  | -                   |
| Start       | 1  | End     | 2496                |
| Name        | OJ990715_02.9922.C6.o2.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 1410                |
| GI          | 4587595  | Score   | 194                 |
| Exons       | 1..22, 1169..1410  |         |                     |
| GI Descrip. | (AC006951) putative GDSL-motif lipase/hydrolase [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22394                     | Seq. ID | OJ990715_02.9922.C6 |
| Gene No. | 46619                     | Strand  | -                   |
| Start    | 1                         | End     | 2496                |
| Name     | OJ990715_02.9922.C6.o1.gs | Method  | GENSCAN             |
| Start    | 275                       | End     | 1443                |
| GI       | none                      | Score   | .41                 |
| Exons    | 275..980, 1169..1443      |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22394 | Seq. ID | OJ990715_02.9922.C6 |
| Gene No. | 46619 | Strand  | -                   |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 1  | End    | 2496    |
| Name        | OJ990715_02.9922.C6.o3.np                      | Method | AAT/NAP |
| Start       | 596  | End    | 2496    |
| GI          | 6539588  | Score  | 106     |
| Exons       | 596..654, 2253..2496                           |        |         |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa] |        |         |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22394                     | Seq. ID | OJ990715_02.9922.C6 |
| Gene No. | 46620                     | Strand  | -                   |
| Start    | 3397                      | End     | 3594                |
| Name     | OJ990715_02.9922.C6.o2.gs | Method  | GENSCAN             |
| Start    | 3397                      | End     | 3594                |
| GI       | none                      | Score   | .83                 |
| Exons    | 3397..3594                |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22394  | Seq. ID | OJ990715_02.9922.C6 |
| Gene No.    | 46621  | Strand  | -                   |
| Start       | 3962   | End     | 16621               |
| Name        | OJ990715_02.9922.C6.o4.np  | Method  | AAT/NAP             |
| Start       | 3962   | End     | 16621               |
| GI          | 1888357  | Score   | 2198                |
| Exons       | 3962..3997, 4481..4678, 4813..4881, 4957..5004, 5091..5186, 5421..5531, 5639..5723, 6451..6563, 7024..7089, 7265..7390, 7494..7541, 7621..7692, 8113..8172, 8258..8316, 10064..10201, 10499..10718, 10963..11019, 11098..11163, 11455..11532, 11639..11806, 11954..12047, 12119..12219, 12615..12728, 12828..12899, 12983..13066, 13187..13306, 13618..13792, 13869..13957, 16173..16256, 16418..16621 |         |                     |
| GI Descrip. | (X98130) alpha-mannosidase [Arabidopsis thaliana]<br>gi 1890154 emb CAA72432  (Y11767) alpha-mannosidase precursor [Arabidopsis thaliana]  |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22394   | Seq. ID | OJ990715_02.9922.C6 |
| Gene No.    | 46621   | Strand  | -                   |
| Start       | 3962  | End     | 16621               |
| Name        | OJ990715_02.9922.C6.o1.gp   | Method  | AAT/GAP             |
| Start       | 4325  | End     | 5502                |
| GI          | 15498_1.R1084   | Score   | 1153                |
| Exons       | 4325..4678, 4813..4881, 4957..5004, 5091..5186, 5421..5502  |         |                     |
| GI Descrip. | '1888357 emb CAA66821  7.0e-34 (X98130) alpha-mannosidase [Arabidopsis thaliana] >gi_1890154_emb_CAA72432_ (Y11767) alpha-mannosidase precursor [Arabidopsis thaliana]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22394  | Seq. ID | OJ990715_02.9922.C6 |
| Gene No. | 46621  | Strand  | -                   |
| Start    | 3962   | End     | 16621               |
| Name     | OJ990715_02.9922.C6.o3.gs  | Method  | GENSCAN             |
| Start    | 4490   | End     | 9353                |
| GI       | none   | Score   | .87                 |
| Exons    | 4490..4678, 4813..4881, 4957..5004, 5091..5186, 5421..5526, 6451..6563, 7024..7089, 7265..7390, 8949..9353 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22394                     | Seq. ID | OJ990715_02.9922.C6 |
| Gene No. | 46621                     | Strand  | -                   |
| Start    | 3962                      | End     | 16621               |
| Name     | OJ990715_02.9922.C6.o2.gp | Method  | AAT/GAP             |
| Start    | 7360                      | End     | 11737               |

GI 25829\_1.R1084 Score 1592  
 Exons 7360..7390, 7494..7541, 7621..7692, 8113..8172, 8258..8326,  
 10068..10204, 10499..10718, 10963..11019, 11098..11163,  
 11455..11532, 11639..11737  
 GI Descrip. '5852170/emb|AL117265.1|OST17804 1.0e-177 Oryza sativa  
 indica(GLA4) genomic DNA, chromosome 4, BAC clone:t17804'

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
 Gene No. 46621 Strand -  
 Start 3962 End 16621  
 Name OJ990715\_02.9922.C6.o4.gs Method GENSCAN  
 Start 9480 End 16621  
 GI none Score .93  
 Exons 9480..9698, 10068..10204, 10499..10718, 10963..11019,  
 11098..11163, 11455..11532, 11639..11806, 11954..12047,  
 12094..12173, 12615..12728, 12828..12899, 12983..13066,  
 13618..13825, 13869..13957, 16173..16256, 16418..16621

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
 Gene No. 46622 Strand -  
 Start 22833 End 22937  
 Name OJ990715\_02.9922.C6.o5.tm Method TBLASTX:Maize  
 Start 264 End 560  
 GI none Score 92  
 Exons 264..305, 274..357, 284..412, 356..418, 369..413, 378..419,  
 433..540, 444..560, 445..507, 503..541, 513..560

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
 Gene No. 46622 Strand -  
 Start 22833 End 22937  
 Name OJ990715\_02.9922.C6.o4.tm Method TBLASTX:Maize  
 Start 1168 End 1347  
 GI none Score 172  
 Exons 1168..1347, 1169..1336

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
 Gene No. 46622 Strand -  
 Start 22833 End 22937  
 Name OJ990715\_02.9922.C6.o2.tc Method TBLASTX:Cress  
 Start 1174 End 1351  
 GI none Score 136  
 Exons 1174..1350, 1178..1351

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
 Gene No. 46622 Strand -  
 Start 22833 End 22937  
 Name OJ990715\_02.9922.C6.o2.ts Method TBLASTX:Soybean  
 Start 1174 End 1347  
 GI none Score 152  
 Exons 1174..1347, 1178..1342

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
 Gene No. 46622 Strand -  
 Start 22833 End 22937  
 Name OJ990715\_02.9922.C6.o3.tm Method TBLASTX:Maize  
 Start 4470 End 4863  
 GI none Score 249

Exons 4470..4679, 4490..4678, 4792..4863, 4805..4861

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
Gene No. 46622 Strand -  
Start 22833 End 22937  
Name OJ990715\_02.9922.C6.o1.tc Method TBLASTX:Cress  
Start 4493 End 16544  
GI none Score 103  
Exons 4493..4570, 4494..4679, 4792..4875, 4802..4876, 4954..5019,  
5091..5234, 5421..5543, 5636..5725, 6450..6563, 6457..6555,  
7021..7092, 7262..7378, 7482..7541, 7612..7692, 10515..10718,  
10537..10719, 10946..11020, 10957..11019, 11096..11164,  
11104..11148, 11627..11806, 11649..11807, 11954..12046,  
11955..12047, 12116..12220, 12118..12222, 12576..12731,  
12613..12732, 12615..12731, 12822..12890, 12837..12911,  
12983..13069, 13169..13303, 13191..13307, 13618..13821,  
13618..13809, 13727..13813, 13862..13975, 13863..13958,  
16176..16262, 16265..16288, 16418..16543, 16422..16544

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
Gene No. 46622 Strand -  
Start 22833 End 22937  
Name OJ990715\_02.9922.C6.o1.ts Method TBLASTX:Soybean  
Start 4493 End 10700  
GI none Score 64  
Exons 4493..4594, 4509..4586, 4619..4681, 4626..4688, 4809..4877,  
4954..5013, 4964..5002, 5091..5189, 5430..5519, 5636..5734,  
6447..6563, 7021..7092, 7253..7378, 7482..7538, 7612..7692,  
10530..10700, 10534..10668

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
Gene No. 46622 Strand -  
Start 22833 End 22937  
Name OJ990715\_02.9922.C6.o6.tm Method TBLASTX:Maize  
Start 4957 End 10673  
GI none Score 38  
Exons 4957..5013, 4964..5014, 5091..5252, 5091..5234, 5421..5519,  
5421..5519, 5636..5725, 6442..6564, 6450..6563, 7021..7092,  
7253..7378, 7482..7547, 7612..7686, 8107..8175, 10510..10668,  
10513..10671, 10515..10673

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
Gene No. 46622 Strand -  
Start 22833 End 22937  
Name OJ990715\_02.9922.C6.o2.tm Method TBLASTX:Maize  
Start 11672 End 12863  
GI none Score 177  
Exons 11672..11779, 11673..11780, 11674..11784, 11674..11787,  
11757..11807, 11768..11806, 11952..12032, 11954..12055,  
11955..12044, 12118..12222, 12119..12220, 12121..12222,  
12576..12731, 12577..12732, 12600..12731, 12613..12732,  
12614..12772, 12821..12856, 12822..12863, 12823..12855

Seq. No. 22394 Seq. ID OJ990715\_02.9922.C6  
Gene No. 46622 Strand -  
Start 22833 End 22937  
Name OJ990715\_02.9922.C6.o3.ts Method TBLASTX:Soybean

|       |   |       |       |
|-------|---|-------|-------|
| Start | 12654   | End   | 13069 |
| GI    | none  | Score | 90    |
| Exons | 12654..12731, 12654..12731, 12655..12738, 12664..12735,<br>12822..12887, 12983..13069 |       |       |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22394   | Seq. ID | OJ990715_02.9922.C6 |
| Gene No. | 46622   | Strand  | -                   |
| Start    | 22833   | End     | 22937               |
| Name     | OJ990715_02.9922.C6.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 13253   | End     | 16532               |
| GI       | none  | Score   | 79                  |
| Exons    | 13253..13306, 13254..13307, 13615..13833, 13616..13783,<br>13618..13821, 13862..13975, 13863..13973, 16171..16257,<br>16173..16262, 16174..16257, 16394..16522, 16410..16532,<br>16410..16469, 16418..16531 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22394                                    | Seq. ID | OJ990715_02.9922.C6 |
| Gene No. | 46622                                    | Strand  | -                   |
| Start    | 22833                                    | End     | 22937               |
| Name     | OJ990715_02.9922.C6.o4.ts                | Method  | TBLASTX:Soybean     |
| Start    | 16176                                    | End     | 16552               |
| GI       | none                                     | Score   | 104                 |
| Exons    | 16176..16262, 16418..16552, 16422..16544 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22394  | Seq. ID | OJ990715_02.9922.C6 |
| Gene No.    | 46622  | Strand  | -                   |
| Start       | 22833  | End     | 22937               |
| Name        | OJ990715_02.9922.C6.o6.np                    | Method  | AAT/NAP             |
| Start       | 22833  | End     | 22937               |
| GI          | 5777617                                      | Score   | 98                  |
| Exons       | 22833..22937                                 |         |                     |
| GI Descrip. | (AJ245900) CAA30375.1 protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22395                     | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46623                     | Strand  | +                   |
| Start    | 14034                     | End     | 15626               |
| Name     | OJ990715_02.9922.C7.o3.gs | Method  | GENSCAN             |
| Start    | 14034                     | End     | 15626               |
| GI       | none                      | Score   | .99                 |
| Exons    | 14034..15626              |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22395  | Seq. ID | OJ990715_02.9922.C7 |
| Gene No.    | 46623  | Strand  | +                   |
| Start       | 14034  | End     | 15626               |
| Name        | OJ990715_02.9922.C7.o3.np                                  | Method  | AAT/NAP             |
| Start       | 14034  | End     | 15620               |
| GI          | 5042430  | Score   | 1060                |
| Exons       | 14034..15620   |         |                     |
| GI Descrip. | (AC006193) Putative cytochrome P450 [Arabidopsis thaliana] |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22395                      | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46624                      | Strand  | +                   |
| Start    | 16871                      | End     | 17133               |
| Name     | OJ990715_02.9922.C7.o4.gs  | Method  | GENSCAN             |
| Start    | 16871                      | End     | 17133               |
| GI       | none                       | Score   | .92                 |
| Exons    | 16871..16923, 16983..17133 |         |                     |

Seq. No. 22395  
 Gene No. 46625  
 Start 21716  
 Name OJ990715\_02.9922.C7.o4.gp  
 Start 21716  
 GI none  
 Exons 21716..22220

Seq. ID OJ990715\_02.9922.C7  
 Strand +  
 End 22220  
 Method AAT/GAP  
 End 22220  
 Score 758

Seq. No. 22395  
 Gene No. 46626  
 Start 2825  
 Name OJ990715\_02.9922.C7.o2.np  
 Start 2825  
 GI 4680203  
 Exons 2825..2854, 6161..7847, 8312..  
 GI Descrip. (AF114171) TNP2-like protein [Sorghum bicolor]

Seq. ID OJ990715\_02.9922.C7  
 Strand -  
 End 11649  
 Method AAT/NAP  
 End 9774  
 Score 2040

Seq. No. 22395  
 Gene No. 46626  
 Start 2825  
 Name OJ990715\_02.9922.C7.o1.np  
 Start 2897  
 GI 6539570  
 Exons 2897..2963, 3123..3325  
 GI Descrip. (AP000836) hypothetical protein [Oryza sativa]

Seq. ID OJ990715\_02.9922.C7  
 Strand -  
 End 11649  
 Method AAT/NAP  
 End 3325  
 Score 253

Seq. No. 22395  
 Gene No. 46626  
 Start 2825  
 Name OJ990715\_02.9922.C7.o2.gs  
 Start 5023  
 GI none  
 Exons 5023..5208, 5288..5386, 5481..  
 7388..7847, 9395..9504, 9552..  
 11171..11243, 11305..11649

Seq. ID OJ990715\_02.9922.C7  
 Strand -  
 End 11649  
 Method GENSCAN  
 End 11649  
 Score .42

Seq. No. 22395  
 Gene No. 46626  
 Start 2825  
 Name OJ990715\_02.9922.C7.o1.gp  
 Start 6013  
 GI 342\_1.R1084  
 Exons 6013..7843

Seq. ID OJ990715\_02.9922.C7  
 Strand -  
 End 11649  
 Method AAT/GAP  
 End 7843  
 Score 3008

GI Descrip. '4574406/gb|AAD24042.1| 0.0e+00 (AF121139) RIM2 protein [Oryza sativa]'

Seq. No. 22395  
 Gene No. 46626  
 Start 2825  
 Name OJ990715\_02.9922.C7.o3.gp  
 Start 7708  
 GI 2310235  
 Exons 7708..7847, 8259..8296  
 GI Descrip. 5852182/emb|CAB55420.1| 9.0e-13 (AL117265) zhb0012.1 [Oryza sativa]

Seq. ID OJ990715\_02.9922.C7  
 Strand -  
 End 11649  
 Method AAT/GAP  
 End 8296  
 Score 287

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22395  | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627  | Strand  | -                   |
| Start    | 19742  | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o3.tw                                  | Method  | TBLASTX:Wheat       |
| Start    | 5989   | End     | 6363                |
| GI       | none   | Score   | 148                 |
| Exons    | 5989..6243, 6061..6231, 6065..6244, 6218..6361, 6241..6363 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22395                     | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627                     | Strand  | -                   |
| Start    | 19742                     | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o3.ts | Method  | TBLASTX:Soybean     |
| Start    | 6352                      | End     | 6594                |
| GI       | none                      | Score   | 218                 |
| Exons    | 6352..6594                |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22395                              | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627                              | Strand  | -                   |
| Start    | 19742                              | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o2.tm          | Method  | TBLASTX:Maize       |
| Start    | 6424                               | End     | 6882                |
| GI       | none                               | Score   | 96                  |
| Exons    | 6424..6618, 6628..6882, 6628..6870 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22395  | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627  | Strand  | -                   |
| Start    | 19742  | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 6458   | End     | 6927                |
| GI       | none   | Score   | 171                 |
| Exons    | 6458..6664, 6460..6666, 6460..6687, 6667..6765, 6668..6760, 6769..6873, 6773..6862, 6874..6927, 6875..6919 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22395                              | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627                              | Strand  | -                   |
| Start    | 19742                              | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o2.tc          | Method  | TBLASTX:Cress       |
| Start    | 6715                               | End     | 7063                |
| GI       | none                               | Score   | 85                  |
| Exons    | 6715..7056, 6734..6871, 6911..7063 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22395  | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627  | Strand  | -                   |
| Start    | 19742  | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o2.ts                                  | Method  | TBLASTX:Soybean     |
| Start    | 6796   | End     | 7225                |
| GI       | none   | Score   | 126                 |
| Exons    | 6796..7092, 6814..7038, 7087..7149, 7142..7225, 7150..7224 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22395  | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627  | Strand  | -                   |
| Start    | 19742  | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o4.tw  | Method  | TBLASTX:Wheat       |
| Start    | 7141   | End     | 22222               |
| GI       | none   | Score   | 99                  |
| Exons    | 7141..7329, 7154..7315, 7156..7392, 7157..7405, 7317..7406, 7389..7496, 22145..22222 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22395  | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627  | Strand  | -                   |
| Start    | 19742  | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 14133  | End     | 15611               |
| GI       | none   | Score   | 151                 |
| Exons    | 14133..14360, 14358..14552, 14547..14687, 14706..14852,<br>14949..15113, 14999..15100, 15114..15374, 15131..15361,<br>15375..15521, 15413..15610, 15555..15611 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22395                      | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627                      | Strand  | -                   |
| Start    | 19742                      | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 14136                      | End     | 14405               |
| GI       | none                       | Score   | 249                 |
| Exons    | 14136..14405, 14168..14404 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22395   | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627   | Strand  | -                   |
| Start    | 19742   | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o5.tw   | Method  | TBLASTX:Wheat       |
| Start    | 14139   | End     | 14537               |
| GI       | none  | Score   | 83                  |
| Exons    | 14139..14273, 14280..14384, 14289..14345, 14403..14537,<br>14417..14461 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22395   | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627   | Strand  | -                   |
| Start    | 19742   | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o1.tc   | Method  | TBLASTX:Cress       |
| Start    | 14145   | End     | 15611               |
| GI       | none  | Score   | 125                 |
| Exons    | 14145..14339, 14388..14555, 14571..14699, 14679..14825,<br>14907..14939, 14958..15143, 14976..15083, 14999..15148,<br>15108..15362, 15137..15361, 15369..15545, 15407..15514,<br>15552..15611 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22395   | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627   | Strand  | -                   |
| Start    | 19742   | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 14406   | End     | 15613               |
| GI       | none  | Score   | 120                 |
| Exons    | 14406..14549, 14420..14464, 14523..14690, 14555..14626,<br>14691..14801, 14720..14788, 14901..14987, 14943..15101,<br>14958..15089, 15002..15106, 15002..15103, 15134..15613,<br>15135..15611 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22395  | Seq. ID | OJ990715_02.9922.C7 |
| Gene No. | 46627  | Strand  | -                   |
| Start    | 19742  | End     | 22222               |
| Name     | OJ990715_02.9922.C7.o2.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 15254  | End     | 15608               |
| GI       | none   | Score   | 357                 |
| Exons    | 15254..15514, 15255..15542, 15552..15608, 15552..15602 |         |                     |



|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22395   | Seq. ID | OJ990715_02.9922.C7 |
| Gene No.    | 46627   | Strand  | -                   |
| Start       | 19742   | End     | 22222               |
| Name        | OJ990715_02.9922.C7.o5.gs   | Method  | GENSCAN             |
| Start       | 19742   | End     | 19961               |
| GI          | none  | Score   | .51                 |
| Exons       | 19742..19961  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22396   | Seq. ID | OJ990625_07.9922.C1 |
| Gene No.    | 46628   | Strand  | +                   |
| Start       | 1   | End     | 13405               |
| Name        | OJ990625_07.9922.C1.o1.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 9987                |
| GI          | 6466937   | Score   | 2056                |
| Exons       | 1..57, 3178..6049, 8923..9987   |         |                     |
| GI Descrip. | (AC011621) putative retroelement pol polyprotein [Arabidopsis thaliana]   |         |                     |
|             |   |         |                     |
| Seq. No.    | 22396   | Seq. ID | OJ990625_07.9922.C1 |
| Gene No.    | 46628   | Strand  | +                   |
| Start       | 1   | End     | 13405               |
| Name        | OJ990625_07.9922.C1.o2.gs   | Method  | GENSCAN             |
| Start       | 3118  | End     | 13315               |
| GI          | none  | Score   | .46                 |
| Exons       | 3118..3884, 4083..4240, 4288..4658, 4974..5289, 6960..7201, 8096..8195, 9580..9754, 11831..11838, 12109..12312, 13107..13315              |         |                     |
|             |   |         |                     |
| Seq. No.    | 22396   | Seq. ID | OJ990625_07.9922.C1 |
| Gene No.    | 46628   | Strand  | +                   |
| Start       | 1   | End     | 13405               |
| Name        | OJ990625_07.9922.C1.o2.np   | Method  | AAT/NAP             |
| Start       | 11895   | End     | 13405               |
| GI          | 3063699   | Score   | 127                 |
| Exons       | 11895..12209, 13158..13405  |         |                     |
| GI Descrip. | (AL022537) putative protein [Arabidopsis thaliana]  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22396   | Seq. ID | OJ990625_07.9922.C1 |
| Gene No.    | 46629   | Strand  | -                   |
| Start       | 566   | End     | 2164                |
| Name        | OJ990625_07.9922.C1.o1.gs   | Method  | GENSCAN             |
| Start       | 566   | End     | 2164                |
| GI          | none  | Score   | .63                 |
| Exons       | 566..669, 714..805, 898..1140, 1426..1475, 1883..2047, 2102..2164   |         |                     |
|             |   |         |                     |
| Seq. No.    | 22396   | Seq. ID | OJ990625_07.9922.C1 |
| Gene No.    | 46630   | Strand  | -                   |
| Start       | 2373  | End     | 2940                |
| Name        | OJ990625_07.9922.C1.o1.gp   | Method  | AAT/GAP             |
| Start       | 2373  | End     | 2940                |
| GI          | 4879016   | Score   | 835                 |
| Exons       | 2373..2940  |         |                     |
| GI Descrip. | 6041757/gb AC011806.1 AC011806 0.0e+00 Genomic Sequence For Oryza sativa Clone 10P20, Lemont Strain, Complete Sequence, complete sequence |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22396                              | Seq. ID | OJ990625_07.9922.C1 |
| Gene No. | 46631                              | Strand  |                     |
| Start    | 3433                               | End     | 4068                |
| Name     | OJ990625_07.9922.C1.o6.tm          | Method  | TBLASTX:Maize       |
| Start    | 3433                               | End     | 4068                |
| GI       | none                               | Score   | 109                 |
| Exons    | 3433..3555, 3592..3891, 3973..4068 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22396                              | Seq. ID | OJ990625_07.9922.C1 |
| Gene No. | 46632                              | Strand  |                     |
| Start    | 4272                               | End     | 4808                |
| Name     | OJ990625_07.9922.C1.o2.tw          | Method  | TBLASTX:Wheat       |
| Start    | 4272                               | End     | 4754                |
| GI       | none                               | Score   | 333                 |
| Exons    | 4272..4754, 4389..4712, 4553..4720 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22396                     | Seq. ID | OJ990625_07.9922.C1 |
| Gene No. | 46632                     | Strand  |                     |
| Start    | 4272                      | End     | 4808                |
| Name     | OJ990625_07.9922.C1.o2.tm | Method  | TBLASTX:Maize       |
| Start    | 4332                      | End     | 4808                |
| GI       | none                      | Score   | 454                 |
| Exons    | 4332..4808, 4335..4592    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22396                     | Seq. ID | OJ990625_07.9922.C1 |
| Gene No. | 46633                     | Strand  |                     |
| Start    | 4731                      | End     | 5354                |
| Name     | OJ990625_07.9922.C1.o1.ts | Method  | TBLASTX:Soybean     |
| Start    | 4731                      | End     | 5090                |
| GI       | none                      | Score   | 273                 |
| Exons    | 4731..5090, 4835..5089    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22396                     | Seq. ID | OJ990625_07.9922.C1 |
| Gene No. | 46633                     | Strand  |                     |
| Start    | 4731                      | End     | 5354                |
| Name     | OJ990625_07.9922.C1.o4.tw | Method  | TBLASTX:Wheat       |
| Start    | 4806                      | End     | 5204                |
| GI       | none                      | Score   | 235                 |
| Exons    | 4806..5204, 4835..5203    |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22396                              | Seq. ID | OJ990625_07.9922.C1 |
| Gene No. | 46633                              | Strand  |                     |
| Start    | 4731                               | End     | 5354                |
| Name     | OJ990625_07.9922.C1.o1.tm          | Method  | TBLASTX:Maize       |
| Start    | 4830                               | End     | 5354                |
| GI       | none                               | Score   | 562                 |
| Exons    | 4830..5210, 4833..5354, 4835..5044 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22396  | Seq. ID | OJ990625_07.9922.C1 |
| Gene No. | 46634  | Strand  |                     |
| Start    | 5357   | End     | 9299                |
| Name     | OJ990625_07.9922.C1.o5.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 5357   | End     | 5794                |
| GI       | none   | Score   | 120                 |
| Exons    | 5357..5386, 5419..5529, 5420..5557, 5549..5794, 5677..5793 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22396 | Seq. ID | OJ990625_07.9922.C1 |
|----------|-------|---------|---------------------|

Gene No. 46634  
 Start 5357  
 Name OJ990625\_07.9922.C1.o1.tw  
 Start 5552  
 GI none  
 Exons 5552..5947, 5686..5946

Strand  
 End 9299  
 Method TBLASTX:Wheat  
 End 5947  
 Score 391

Seq. No. 22396  
 Gene No. 46634  
 Start 5357  
 Name OJ990625\_07.9922.C1.o7.tm  
 Start 5795  
 GI none  
 Exons 5795..5971, 5800..5967

Seq. ID OJ990625\_07.9922.C1  
 Strand  
 End 9299  
 Method TBLASTX:Maize  
 End 5971  
 Score 190

Seq. No. 22396  
 Gene No. 46634  
 Start 5357  
 Name OJ990625\_07.9922.C1.o2.ts  
 Start 5833  
 GI none  
 Exons 5833..6042, 5834..6046, 8923..9027

Seq. ID OJ990625\_07.9922.C1  
 Strand  
 End 9299  
 Method TBLASTX:Soybean  
 End 9027  
 Score 189

Seq. No. 22396  
 Gene No. 46634  
 Start 5357  
 Name OJ990625\_07.9922.C1.o4.tm  
 Start 5972  
 GI none  
 Exons 5972..6049, 5974..6039, 8920..9027, 8921..9025, 8946..9068, 9023..9250, 9033..9251

Seq. ID OJ990625\_07.9922.C1  
 Strand  
 End 9299  
 Method TBLASTX:Maize  
 End 9251  
 Score 93

Seq. No. 22396  
 Gene No. 46634  
 Start 5357  
 Name OJ990625\_07.9922.C1.o5.tw  
 Start 8923  
 GI none  
 Exons 8923..9027, 9039..9299

Seq. ID OJ990625\_07.9922.C1  
 Strand  
 End 9299  
 Method TBLASTX:Wheat  
 End 9299  
 Score 64

Seq. No. 22396  
 Gene No. 46635  
 Start 9252  
 Name OJ990625\_07.9922.C1.o3.tm  
 Start 9252  
 GI none  
 Exons 9252..9308, 9263..9307, 9349..9633, 9369..9431, 9468..9605, 9695..9763, 9772..9888, 9796..9879, 9942..10004, 9949..9999

Seq. ID OJ990625\_07.9922.C1  
 Strand  
 End 10004  
 Method TBLASTX:Maize  
 End 10004  
 Score 90

Seq. No. 22396  
 Gene No. 46635  
 Start 9252  
 Name OJ990625\_07.9922.C1.o3.tw  
 Start 9349  
 GI none  
 Exons 9349..9642, 9357..9608

Seq. ID OJ990625\_07.9922.C1  
 Strand  
 End 10004  
 Method TBLASTX:Wheat  
 End 9642  
 Score 280

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22397  | Seq. ID | OJ990625_07.9922.C2 |
| Gene No.    | 46636  | Strand  | +                   |
| Start       | 11377  | End     | 11491               |
| Name        | OJ990625_07.9922.C2.o2.gp  | Method  | AAT/GAP             |
| Start       | 11377  | End     | 11491               |
| GI          | LIB3477-003-P1-K1-E9   | Score   | 120                 |
| Exons       | 11377..11491   |         |                     |
| GI Descrip. | '2498586/sp Q40638 MPO1_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY S 1 PRECURSOR (ORY S I) >gi_1173557 (U31771) Ory s 1 [Oryza sativa]' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22397   | Seq. ID | OJ990625_07.9922.C2 |
| Gene No.    | 46637   | Strand  | +                   |
| Start       | 13532   | End     | 13802               |
| Name        | OJ990625_07.9922.C2.o3.np   | Method  | AAT/NAP             |
| Start       | 13532   | End     | 13802               |
| GI          | 5922634   | Score   | 128                 |
| Exons       | 13532..13631, 13752..13802  |         |                     |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6016867 dbj BAA85210.1  (AP000570) hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22397                     | Seq. ID | OJ990625_07.9922.C2 |
| Gene No. | 46638                     | Strand  | -                   |
| Start    | 15                        | End     | 283                 |
| Name     | OJ990625_07.9922.C2.o1.gs | Method  | GENSCAN             |
| Start    | 15                        | End     | 283                 |
| GI       | none                      | Score   | .97                 |
| Exons    | 15..283                   |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22397   | Seq. ID | OJ990625_07.9922.C2 |
| Gene No.    | 46639   | Strand  | -                   |
| Start       | 5690  | End     | 13802               |
| Name        | OJ990625_07.9922.C2.o2.np                     | Method  | AAT/NAP             |
| Start       | 5690  | End     | 12323               |
| GI          | 6705984                                       | Score   | 248                 |
| Exons       | 5690..5739, 9406..9909, 12261..12323          |         |                     |
| GI Descrip. | (AB033235) gag-pol polyprotein [Oryza sativa] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22397   | Seq. ID | OJ990625_07.9922.C2 |
| Gene No.    | 46639   | Strand  | -                   |
| Start       | 5690  | End     | 13802               |
| Name        | OJ990625_07.9922.C2.o1.np   | Method  | AAT/NAP             |
| Start       | 5959  | End     | 13802               |
| GI          | 6063554   | Score   | 155                 |
| Exons       | 5959..6133, 7274..7510, 7632..7834, 13774..13802  |         |                     |
| GI Descrip. | (AP000615) ESTs AU075609(C63344),C71850(E0464),C98611(E0464) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22397                     | Seq. ID | OJ990625_07.9922.C2 |
| Gene No. | 46639                     | Strand  | -                   |
| Start    | 5690                      | End     | 13802               |
| Name     | OJ990625_07.9922.C2.o1.gp | Method  | AAT/GAP             |
| Start    | 6119                      | End     | 6550                |
| GI       | 2428185                   | Score   | 713                 |
| Exons    | 6119..6550                |         |                     |

GI Descrip. 5852170/emb|AL117265.1|OST17804 1.0e-177 Oryza sativa indica(GLA4) genomic DNA, chromosome 4, BAC clone:t17804

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22397  | Seq. ID | OJ990625_07.9922.C2 |
| Gene No. | 46639  | Strand  | -                   |
| Start    | 5690   | End     | 13802               |
| Name     | OJ990625_07.9922.C2.o1.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 8429   | End     | 9776                |
| GI       | none   | Score   | 57                  |
| Exons    | 8429..8482, 8466..8516, 9522..9776, 9598..9762 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22397                     | Seq. ID | OJ990625_07.9922.C2 |
| Gene No. | 46639                     | Strand  | -                   |
| Start    | 5690                      | End     | 13802               |
| Name     | OJ990625_07.9922.C2.o1.tm | Method  | TBLASTX:Maize       |
| Start    | 9474                      | End     | 9740                |
| GI       | none                      | Score   | 75                  |
| Exons    | 9474..9740, 9577..9723    |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22397                     | Seq. ID | OJ990625_07.9922.C2 |
| Gene No. | 46639                     | Strand  | -                   |
| Start    | 5690                      | End     | 13802               |
| Name     | OJ990625_07.9922.C2.o1.ts | Method  | TBLASTX:Soybean     |
| Start    | 9516                      | End     | 9740                |
| GI       | none                      | Score   | 75                  |
| Exons    | 9516..9740, 9577..9723    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22397                                    | Seq. ID | OJ990625_07.9922.C2 |
| Gene No. | 46639                                    | Strand  | -                   |
| Start    | 5690                                     | End     | 13802               |
| Name     | OJ990625_07.9922.C2.o3.gs                | Method  | GENSCAN             |
| Start    | 12096                                    | End     | 13716               |
| GI       | none                                     | Score   | .81                 |
| Exons    | 12096..12599, 12964..13110, 13609..13716 |         |                     |

|          |                                  |         |                     |
|----------|----------------------------------|---------|---------------------|
| Seq. No. | 22398                            | Seq. ID | OJ990625_07.9922.C3 |
| Gene No. | 46640                            | Strand  | -                   |
| Start    | 228                              | End     | 1500                |
| Name     | OJ990625_07.9922.C3.o1.gs        | Method  | GENSCAN             |
| Start    | 228                              | End     | 1500                |
| GI       | none                             | Score   | .5                  |
| Exons    | 228..614, 1091..1303, 1411..1500 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22398                     | Seq. ID | OJ990625_07.9922.C3 |
| Gene No. | 46640                     | Strand  | -                   |
| Start    | 228                       | End     | 1500                |
| Name     | OJ990625_07.9922.C3.o1.np | Method  | AAT/NAP             |
| Start    | 729                       | End     | 1215                |
| GI       | 4680183                   | Score   | 253                 |
| Exons    | 729..1215                 |         |                     |

GI Descrip. (AF111709) gag-pol protein [Oryza sativa subsp. indica]

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22398                     | Seq. ID | OJ990625_07.9922.C3 |
| Gene No. | 46640                     | Strand  | -                   |
| Start    | 228                       | End     | 1500                |
| Name     | OJ990625_07.9922.C3.o1.tw | Method  | TBLASTX:Wheat       |
| Start    | 890                       | End     | 1231                |

GI none  
Exons 890..1231, 909..1181

Score 74

Seq. No. 22398  
Gene No. 46640  
Start 228  
Name OJ990625\_07.9922.C3.o1.tm  
Start 977  
GI none  
Exons 977..1246, 978..1115

Seq. ID OJ990625\_07.9922.C3  
Strand -  
End 1500  
Method TBLASTX:Maize  
End 1246  
Score 60

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o1.np  
Start 1  
GI 4680179  
Exons 1..2943

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method AAT/NAP  
End 2943  
Score 5037

GI Descrip. (AF111709) polyprotein [Oryza sativa subsp. indica]

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o1.gs  
Start 76  
GI none  
Exons 76..751, 845..2946

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method GENSCAN  
End 2946  
Score .87

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o4.tw  
Start 106  
GI none  
Exons 106..588, 210..545, 217..579

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method TBLASTX:Wheat  
End 588  
Score 550

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o5.tm  
Start 118  
GI none  
Exons 118..405, 216..407

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method TBLASTX:Maize  
End 407  
Score 322

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o4.ts  
Start 142  
GI none  
Exons 142..456, 258..455

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method TBLASTX:Soybean  
End 456  
Score 183

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o3.tm  
Start 475

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method TBLASTX:Maize  
End 975

|          |  |         |                     |
|----------|--|---------|---------------------|
| GI       | none   | Score   | 161                 |
| Exons    | 475..654, 640..975, 726..857, 882..932           |         |                     |
|          |  |         |                     |
| Seq. No. | 22399  | Seq. ID | OJ990625_07.9922.C5 |
| Gene No. | 46641  | Strand  | +                   |
| Start    | 1  | End     | 2946                |
| Name     | OJ990625_07.9922.C5.o1.ts                        | Method  | TBLASTX:Soybean     |
| Start    | 529  | End     | 924                 |
| GI       | none   | Score   | 57                  |
| Exons    | 529..561, 529..573, 565..924, 565..708, 669..923 |         |                     |
|          |  |         |                     |
| Seq. No. | 22399  | Seq. ID | OJ990625_07.9922.C5 |
| Gene No. | 46641  | Strand  | +                   |
| Start    | 1  | End     | 2946                |
| Name     | OJ990625_07.9922.C5.o5.tw                        | Method  | TBLASTX:Wheat       |
| Start    | 637  | End     | 939                 |
| GI       | none   | Score   | 396                 |
| Exons    | 637..939, 638..739, 669..938                     |         |                     |
|          |  |         |                     |
| Seq. No. | 22399  | Seq. ID | OJ990625_07.9922.C5 |
| Gene No. | 46641  | Strand  | +                   |
| Start    | 1  | End     | 2946                |
| Name     | OJ990625_07.9922.C5.o2.tw                        | Method  | TBLASTX:Wheat       |
| Start    | 940  | End     | 1455                |
| GI       | none   | Score   | 624                 |
| Exons    | 940..1455, 948..1283, 1018..1365                 |         |                     |
|          |  |         |                     |
| Seq. No. | 22399  | Seq. ID | OJ990625_07.9922.C5 |
| Gene No. | 46641  | Strand  | +                   |
| Start    | 1  | End     | 2946                |
| Name     | OJ990625_07.9922.C5.o3.ts                        | Method  | TBLASTX:Soybean     |
| Start    | 946  | End     | 1191                |
| GI       | none   | Score   | 202                 |
| Exons    | 946..1191  |         |                     |
|          |  |         |                     |
| Seq. No. | 22399  | Seq. ID | OJ990625_07.9922.C5 |
| Gene No. | 46641  | Strand  | +                   |
| Start    | 1  | End     | 2946                |
| Name     | OJ990625_07.9922.C5.o2.tm                        | Method  | TBLASTX:Maize       |
| Start    | 1012   | End     | 1377                |
| GI       | none   | Score   | 484                 |
| Exons    | 1012..1365, 1014..1280, 1066..1377, 1173..1370   |         |                     |
|          |  |         |                     |
| Seq. No. | 22399  | Seq. ID | OJ990625_07.9922.C5 |
| Gene No. | 46641  | Strand  | +                   |
| Start    | 1  | End     | 2946                |
| Name     | OJ990625_07.9922.C5.o3.tw                        | Method  | TBLASTX:Wheat       |
| Start    | 1456   | End     | 1932                |
| GI       | none   | Score   | 552                 |
| Exons    | 1456..1932, 1486..1899, 1677..1931               |         |                     |
|          |  |         |                     |
| Seq. No. | 22399  | Seq. ID | OJ990625_07.9922.C5 |
| Gene No. | 46641  | Strand  | +                   |
| Start    | 1  | End     | 2946                |
| Name     | OJ990625_07.9922.C5.o2.ts                        | Method  | TBLASTX:Soybean     |
| Start    | 1720   | End     | 1980                |
| GI       | none   | Score   | 285                 |

Exons 1720..1980, 1725..1979

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o4.tm  
Start 1779  
GI none  
Exons 1779..2066, 1780..2070

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method TBLASTX:Maize  
End 2070  
Score 379

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o1.tw  
Start 1939  
GI none  
Exons 1939..2565, 1941..2564

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method TBLASTX:Wheat  
End 2565  
Score 731

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o1.tm  
Start 2122  
GI none  
Exons 2122..2280, 2127..2273, 2278..

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method TBLASTX:Maize  
End 2718  
Score 221  
2718, 2280..2693

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o6.tw  
Start 2565  
GI none  
Exons 2565..2636, 2566..2898, 2593..

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method TBLASTX:Wheat  
End 2933  
Score 356  
2673, 2658..2774, 2880..2933

Seq. No. 22399  
Gene No. 46641  
Start 1  
Name OJ990625\_07.9922.C5.o6.tm  
Start 2722  
GI none  
Exons 2722..2919

Seq. ID OJ990625\_07.9922.C5  
Strand +  
End 2946  
Method TBLASTX:Maize  
End 2919  
Score 197

Seq. No. 22400  
Gene No. 46642  
Start 198  
Name OJ990625\_07.9922.C6.o1.gs  
Start 198  
GI none  
Exons 198..262, 446..626

Seq. ID OJ990625\_07.9922.C6  
Strand +  
End 626  
Method GENSCAN  
End 626  
Score .81

Seq. No. 22400  
Gene No. 46643  
Start 2854  
Name OJ990625\_07.9922.C6.o3.gs  
Start 2854  
GI none  
Exons 2854..3081, 4548..4760, 5687..

Seq. ID OJ990625\_07.9922.C6  
Strand +  
End 17128  
Method GENSCAN  
End 6707  
Score .43  
5719, 5992..6070, 6106..6292,



6632..6707

Seq. No. 22400 Seq. ID OJ990625\_07.9922.C6  
Gene No. 46643 Strand +  
Start 2854 End 17128  
Name OJ990625\_07.9922.C6.o1.np Method AAT/NAP  
Start 6083 End 14239  
GI 6056374 Score 1811  
Exons 6083..6292, 6372..6443, 6632..6706, 6750..6851, 8534..8605,  
8716..8792, 8869..8935, 9434..9540, 9596..9739, 9926..9997,  
10088..10153, 10250..10315, 10387..10431, 10570..10631,  
10715..11094, 11179..11359, 11433..11588, 11673..11791,  
11915..12125, 12301..12532, 12614..12764, 12852..13076,  
14088..14239  
GI Descrip. (AC009894) Similar to serine/threonine kinases [Arabidopsis  
thaliana]

Seq. No. 22400 Seq. ID OJ990625\_07.9922.C6  
Gene No. 46643 Strand +  
Start 2854 End 17128  
Name OJ990625\_07.9922.C6.o4.gs Method GENSCAN  
Start 7655 End 17128  
GI none Score .49  
Exons 7655..7749, 8534..8605, 8864..8935, 9049..9101, 10715..11094,  
11179..11305, 11433..11591, 11673..11791, 11915..12125,  
12352..12532, 12614..12764, 12852..13095, 14408..14487,  
14559..14665, 14799..14851, 15005..15076, 15449..15576,  
16142..17128

Seq. No. 22400 Seq. ID OJ990625\_07.9922.C6  
Gene No. 46644 Strand -  
Start 1709 End 2116  
Name OJ990625\_07.9922.C6.o2.gs Method GENSCAN  
Start 1709 End 2116  
GI none Score .43  
Exons 1709..2116

Seq. No. 22400 Seq. ID OJ990625\_07.9922.C6  
Gene No. 46645 Strand  
Start 10777 End 13098  
Name OJ990625\_07.9922.C6.o2.ts Method TBLASTX:Soybean  
Start 10777 End 11539  
GI none Score 201  
Exons 10777..11094, 10950..11093, 10992..11099, 11157..11225,  
11179..11271, 11251..11313, 11320..11358, 11432..11539

Seq. No. 22400 Seq. ID OJ990625\_07.9922.C6  
Gene No. 46645 Strand  
Start 10777 End 13098  
Name OJ990625\_07.9922.C6.o2.tm Method TBLASTX:Maize  
Start 10824 End 11313  
GI none Score 282  
Exons 10824..11084, 10825..11094, 10827..11096, 10948..11094,  
11175..11303, 11179..11313

Seq. No. 22400 Seq. ID OJ990625\_07.9922.C6  
Gene No. 46645 Strand

|       |   |        |               |
|-------|---|--------|---------------|
| Start | 10777   | End    | 13098         |
| Name  | OJ990625_07.9922.C6.o2.tc   | Method | TBLASTX:Cress |
| Start | 10867   | End    | 11454         |
| GI    | none  | Score  | 216           |
| Exons | 10867..11094, 10923..11087, 11176..11307, 11179..11313,<br>11317..11358, 11319..11360, 11431..11454 |        |               |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22400   | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46645   | Strand  |                     |
| Start    | 10777   | End     | 13098               |
| Name     | OJ990625_07.9922.C6.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 11432   | End     | 12761               |
| GI       | none  | Score   | 46                  |
| Exons    | 11432..11476, 11476..11568, 11672..11791, 11889..12125,<br>11906..12127, 11907..12125, 11914..12126, 12299..12532,<br>12300..12530, 12314..12532, 12324..12554, 12614..12760,<br>12615..12761, 12630..12761 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22400  | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46645  | Strand  |                     |
| Start    | 10777  | End     | 13098               |
| Name     | OJ990625_07.9922.C6.o3.tc                              | Method  | TBLASTX:Cress       |
| Start    | 11702  | End     | 12127               |
| GI       | none   | Score   | 107                 |
| Exons    | 11702..11794, 11755..11793, 11911..12126, 11912..12127 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22400                                    | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46645                                    | Strand  |                     |
| Start    | 10777                                    | End     | 13098               |
| Name     | OJ990625_07.9922.C6.o3.tw                | Method  | TBLASTX:Wheat       |
| Start    | 11717                                    | End     | 12109               |
| GI       | none                                     | Score   | 68                  |
| Exons    | 11717..11803, 11906..12109, 11983..12108 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22400  | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46645  | Strand  |                     |
| Start    | 10777  | End     | 13098               |
| Name     | OJ990625_07.9922.C6.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 11764  | End     | 13031               |
| GI       | none   | Score   | 42                  |
| Exons    | 11764..11790, 11765..11791, 11906..12127, 11914..12126,<br>12284..12529, 12318..12533, 12611..12760, 12615..12764,<br>12624..12764, 12909..13031 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22400   | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46645   | Strand  |                     |
| Start    | 10777   | End     | 13098               |
| Name     | OJ990625_07.9922.C6.o2.tw   | Method  | TBLASTX:Wheat       |
| Start    | 12312   | End     | 12764               |
| GI       | none  | Score   | 74                  |
| Exons    | 12312..12380, 12399..12482, 12498..12530, 12581..12709,<br>12614..12709, 12615..12764 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22400                     | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46645                     | Strand  |                     |
| Start    | 10777                     | End     | 13098               |
| Name     | OJ990625_07.9922.C6.o1.tc | Method  | TBLASTX:Cress       |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 12321  | End   | 12764 |
| GI    | none   | Score | 275   |
| Exons | 12321..12533, 12323..12529, 12351..12530, 12611..12763, 12615..12764 |       |       |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22400                      | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46645                      | Strand  |                     |
| Start    | 10777                      | End     | 13098               |
| Name     | OJ990625_07.9922.C6.o4.tc  | Method  | TBLASTX:Cress       |
| Start    | 12837                      | End     | 13073               |
| GI       | none                       | Score   | 209                 |
| Exons    | 12837..13073, 12852..13070 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22400                                    | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46645                                    | Strand  |                     |
| Start    | 10777                                    | End     | 13098               |
| Name     | OJ990625_07.9922.C6.o4.tm                | Method  | TBLASTX:Maize       |
| Start    | 12849                                    | End     | 13052               |
| GI       | none                                     | Score   | 202                 |
| Exons    | 12849..13052, 12849..13040, 12863..13051 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22400  | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46645  | Strand  |                     |
| Start    | 10777  | End     | 13098               |
| Name     | OJ990625_07.9922.C6.o1.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 12861  | End     | 13098               |
| GI       | none   | Score   | 259                 |
| Exons    | 12861..13076, 12863..13072, 12938..13081, 12955..13098 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22400  | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46646  | Strand  |                     |
| Start    | 16186  | End     | 16744               |
| Name     | OJ990625_07.9922.C6.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 16186  | End     | 16651               |
| GI       | none   | Score   | 198                 |
| Exons    | 16186..16374, 16190..16447, 16190..16381, 16481..16549, 16562..16651 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22400  | Seq. ID | OJ990625_07.9922.C6 |
| Gene No. | 46646  | Strand  |                     |
| Start    | 16186  | End     | 16744               |
| Name     | OJ990625_07.9922.C6.o4.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 16484  | End     | 16744               |
| GI       | none   | Score   | 184                 |
| Exons    | 16484..16681, 16489..16665, 16562..16744, 16688..16744 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22401  | Seq. ID | OJ990625_07.9922.C7 |
| Gene No.    | 46647  | Strand  | +                   |
| Start       | 33   | End     | 3319                |
| Name        | OJ990625_07.9922.C7.o1.np  | Method  | AAT/NAP             |
| Start       | 33   | End     | 3319                |
| GI          | 5734709  | Score   | 95                  |
| Exons       | 33..321, 353..847, 3290..3319  |         |                     |
| GI Descrip. | (AC008075) Contains PF 00069 Eukaryotic protein kinase domain.<br>[Arabidopsis thaliana] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22402 | Seq. ID | OJ990625_07.9922.C8 |
|----------|-------|---------|---------------------|

|          |   |        |         |
|----------|---|--------|---------|
| Gene No. | 46648   | Strand | +       |
| Start    | 84  | End    | 3030    |
| Name     | OJ990625_07.9922.C8.o1.gs                               | Method | GENSCAN |
| Start    | 84  | End    | 2464    |
| GI       | none  | Score  | .53     |
| Exons    | 84..356, 1222..1356, 1572..1657, 1776..1915, 2311..2464 |        |         |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22402  | Seq. ID | OJ990625_07.9922.C8 |
| Gene No.    | 46648  | Strand  | +                   |
| Start       | 84   | End     | 3030                |
| Name        | OJ990625_07.9922.C8.o1.np                      | Method  | AAT/NAP             |
| Start       | 928  | End     | 3030                |
| GI          | 4680203  | Score   | 1331                |
| Exons       | 928..2429, 2945..3030                          |         |                     |
| GI Descrip. | (AF114171) TNP2-like protein [Sorghum bicolor] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22402  | Seq. ID | OJ990625_07.9922.C8 |
| Gene No. | 46648  | Strand  | +                   |
| Start    | 84   | End     | 3030                |
| Name     | OJ990625_07.9922.C8.o2.tw  | Method  | TBLASTX:Wheat       |
| Start    | 1240   | End     | 1631                |
| GI       | none   | Score   | 79                  |
| Exons    | 1240..1377, 1266..1391, 1374..1556, 1382..1549, 1403..1615, 1530..1631, 1555..1614 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22402  | Seq. ID | OJ990625_07.9922.C8 |
| Gene No. | 46648  | Strand  | +                   |
| Start    | 84   | End     | 3030                |
| Name     | OJ990625_07.9922.C8.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 1893   | End     | 2253                |
| GI       | none   | Score   | 100                 |
| Exons    | 1893..1985, 1894..1992, 1895..1996, 2010..2096, 2011..2097, 2097..2150, 2147..2248, 2149..2253 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22402                              | Seq. ID | OJ990625_07.9922.C8 |
| Gene No. | 46648                              | Strand  | +                   |
| Start    | 84                                 | End     | 3030                |
| Name     | OJ990625_07.9922.C8.o1.tm          | Method  | TBLASTX:Maize       |
| Start    | 1895                               | End     | 2287                |
| GI       | none                               | Score   | 89                  |
| Exons    | 1895..2014, 2011..2127, 2138..2287 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22403                     | Seq. ID | OJ990625_07.9922.C9 |
| Gene No. | 46649                     | Strand  | -                   |
| Start    | 572                       | End     | 646                 |
| Name     | OJ990625_07.9922.C9.o1.gs | Method  | GENSCAN             |
| Start    | 572                       | End     | 646                 |
| GI       | none                      | Score   | .42                 |
| Exons    | 572..646                  |         |                     |

|          |                                |         |                      |
|----------|--------------------------------|---------|----------------------|
| Seq. No. | 22404                          | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46650                          | Strand  | +                    |
| Start    | 143                            | End     | 2180                 |
| Name     | OJ990625_07.9922.C10.o1.np     | Method  | AAT/NAP              |
| Start    | 143                            | End     | 2180                 |
| GI       | 6539588                        | Score   | 108                  |
| Exons    | 143..431, 574..631, 2159..2180 |         |                      |

GI Descrip. (AP000837) hypothetical protein [Oryza sativa]

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22404   | Seq. ID | OJ990625_07.9922.C10 |
| Gene No.    | 46651   | Strand  | -                    |
| Start       | 2566  | End     | 8218                 |
| Name        | OJ990625_07.9922.C10.o3.np  | Method  | AAT/NAP              |
| Start       | 2566  | End     | 6666                 |
| GI          | 4914361   | Score   | 2324                 |
| Exons       | 2566..4470, 4504..5283, 5341..5792, 5850..6084, 6139..6666              |         |                      |
| GI Descrip. | (AC007289) putative retroelement pol polyprotein [Arabidopsis thaliana] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22404   | Seq. ID | OJ990625_07.9922.C10 |
| Gene No.    | 46651   | Strand  | -                    |
| Start       | 2566  | End     | 8218                 |
| Name        | OJ990625_07.9922.C10.o2.np  | Method  | AAT/NAP              |
| Start       | 2591  | End     | 8218                 |
| GI          | 5295971   | Score   | 3054                 |
| Exons       | 2591..6860, 8194..8218  |         |                      |
| GI Descrip. | (AB026295) EST D24315(R1718) corresponds to a region of the predicted gene.; Similar to Tobacco DNA for retroviral-like transposon Tnt 1-94.(X13777) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22404  | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651  | Strand  | -                    |
| Start    | 2566   | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 2624   | End     | 3288                 |
| GI       | none   | Score   | 108                  |
| Exons    | 2624..2875, 2628..2876, 2873..2989, 2993..3097, 2994..3065, 3126..3287, 3145..3288 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22404  | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651  | Strand  | -                    |
| Start    | 2566   | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o2.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 2627   | End     | 3257                 |
| GI       | none   | Score   | 66                   |
| Exons    | 2627..2794, 2627..3079, 2676..2804, 2829..3074, 3129..3257 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22404                              | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651                              | Strand  | -                    |
| Start    | 2566                               | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o5.tm         | Method  | TBLASTX:Maize        |
| Start    | 2627                               | End     | 2872                 |
| GI       | none                               | Score   | 72                   |
| Exons    | 2627..2872, 2639..2797, 2745..2837 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22404                              | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651                              | Strand  | -                    |
| Start    | 2566                               | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o4.tw         | Method  | TBLASTX:Wheat        |
| Start    | 2654                               | End     | 3097                 |
| GI       | none                               | Score   | 69                   |
| Exons    | 2654..2833, 2870..3097, 2883..2969 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22404 | Seq. ID | OJ990625_07.9922.C10 |
|----------|-------|---------|----------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46651  | Strand | -             |
| Start    | 2566   | End    | 8218          |
| Name     | OJ990625_07.9922.C10.o2.tm   | Method | TBLASTX:Maize |
| Start    | 2873   | End    | 3330          |
| GI       | none   | Score  | 117           |
| Exons    | 2873..3091, 2874..2987, 2875..3090, 2891..3094, 3123..3320, 3124..3330, 3129..3320 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22404                      | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651                      | Strand  | -                    |
| Start    | 2566                       | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o5.tw | Method  | TBLASTX:Wheat        |
| Start    | 3129                       | End     | 3455                 |
| GI       | none                       | Score   | 93                   |
| Exons    | 3129..3281, 3309..3455     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22404                              | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651                              | Strand  | -                    |
| Start    | 2566                               | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o6.tm         | Method  | TBLASTX:Maize        |
| Start    | 3330                               | End     | 3587                 |
| GI       | none                               | Score   | 111                  |
| Exons    | 3330..3587, 3331..3564, 3423..3569 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22404  | Seq. ID | OJ990625_07.9922.C10 |
| Gene No.    | 46651  | Strand  | -                    |
| Start       | 2566   | End     | 8218                 |
| Name        | OJ990625_07.9922.C10.o3.ts                     | Method  | TBLASTX:Soybean      |
| Start       | 3635   | End     | 4136                 |
| GI          | 5509260  | Score   | 53                   |
| Exons       | 3635..3754, 3657..3755, 3783..4136, 3859..4119 |         |                      |
| GI Descrip. | -  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22404  | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651  | Strand  | -                    |
| Start    | 2566   | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o3.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 3654   | End     | 4097                 |
| GI       | none   | Score   | 56                   |
| Exons    | 3654..3752, 3665..3754, 3777..4046, 3868..3969, 4026..4097 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22404                              | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651                              | Strand  | -                    |
| Start    | 2566                               | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o3.tc         | Method  | TBLASTX:Cress        |
| Start    | 3777                               | End     | 4014                 |
| GI       | none                               | Score   | 64                   |
| Exons    | 3777..4013, 3807..3998, 3838..4014 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22404                      | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651                      | Strand  | -                    |
| Start    | 2566                       | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o3.tm | Method  | TBLASTX:Maize        |
| Start    | 3789                       | End     | 4110                 |
| GI       | none                       | Score   | 244                  |
| Exons    | 3789..4109, 3790..4110     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22404                      | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651                      | Strand  | -                    |
| Start    | 2566                       | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 4435                       | End     | 4929                 |
| GI       | none                       | Score   | 159                  |
| Exons    | 4435..4929, 4634..4924     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22404                      | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651                      | Strand  | -                    |
| Start    | 2566                       | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o2.tc | Method  | TBLASTX:Cress        |
| Start    | 4471                       | End     | 4938                 |
| GI       | none                       | Score   | 232                  |
| Exons    | 4471..4938                 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22404  | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651  | Strand  | -                    |
| Start    | 2566   | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o1.tm                     | Method  | TBLASTX:Maize        |
| Start    | 4531   | End     | 4956                 |
| GI       | none   | Score   | 40                   |
| Exons    | 4531..4602, 4535..4591, 4586..4942, 4609..4956 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22404                              | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651                              | Strand  | -                    |
| Start    | 2566                               | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o1.tw         | Method  | TBLASTX:Wheat        |
| Start    | 4603                               | End     | 5163                 |
| GI       | none                               | Score   | 107                  |
| Exons    | 4603..4692, 4699..5163, 4793..5161 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22404                      | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651                      | Strand  | -                    |
| Start    | 2566                       | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o4.ts | Method  | TBLASTX:Soybean      |
| Start    | 4969                       | End     | 5298                 |
| GI       | none                       | Score   | 216                  |
| Exons    | 4969..5298, 5122..5202     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22404  | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651  | Strand  | -                    |
| Start    | 2566   | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o2.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 5236   | End     | 5688                 |
| GI       | none   | Score   | 53                   |
| Exons    | 5236..5322, 5323..5688, 5411..5572, 5603..5668 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22404  | Seq. ID | OJ990625_07.9922.C10 |
| Gene No. | 46651  | Strand  | -                    |
| Start    | 2566   | End     | 8218                 |
| Name     | OJ990625_07.9922.C10.o4.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 5302   | End     | 5710                 |
| GI       | none   | Score   | 59                   |
| Exons    | 5302..5451, 5306..5446, 5461..5700, 5494..5709, 5510..5710 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22404 | Seq. ID | OJ990625_07.9922.C10 |
|----------|-------|---------|----------------------|

|          |                            |        |               |
|----------|----------------------------|--------|---------------|
| Gene No. | 46651                      | Strand | -             |
| Start    | 2566                       | End    | 8218          |
| Name     | OJ990625_07.9922.C10.o7.tm | Method | TBLASTX:Maize |
| Start    | 6199                       | End    | 6523          |
| GI       | none                       | Score  | 102           |
| Exons    | 6199..6522, 6212..6523     |        |               |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22405                                      | Seq. ID | OJ990625_07.9922.C12 |
| Gene No.    | 46652                                      | Strand  | -                    |
| Start       | 129  | End     | 1246                 |
| Name        | OJ990625_07.9922.C12.o1.np                 | Method  | AAT/NAP              |
| Start       | 129  | End     | 1246                 |
| GI          | 2443320                                    | Score   | 1658                 |
| Exons       | 129..1246                                  |         |                      |
| GI Descrip. | (D85597) polyprotein [Oryza australiensis] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22405                      | Seq. ID | OJ990625_07.9922.C12 |
| Gene No. | 46652                      | Strand  | -                    |
| Start    | 129                        | End     | 1246                 |
| Name     | OJ990625_07.9922.C12.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 168                        | End     | 656                  |
| GI       | none                       | Score   | 326                  |
| Exons    | 168..656, 169..651         |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22405                        | Seq. ID | OJ990625_07.9922.C12 |
| Gene No. | 46652                        | Strand  | -                    |
| Start    | 129                          | End     | 1246                 |
| Name     | OJ990625_07.9922.C12.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 180                          | End     | 765                  |
| GI       | none                         | Score   | 48                   |
| Exons    | 180..362, 393..692, 694..765 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22405                      | Seq. ID | OJ990625_07.9922.C12 |
| Gene No. | 46652                      | Strand  | -                    |
| Start    | 129                        | End     | 1246                 |
| Name     | OJ990625_07.9922.C12.o1.gs | Method  | GENSCAN              |
| Start    | 234                        | End     | 906                  |
| GI       | none                       | Score   | .55                  |
| Exons    | 234..682, 699..906         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22405                                  | Seq. ID | OJ990625_07.9922.C12 |
| Gene No. | 46652                                  | Strand  | -                    |
| Start    | 129                                    | End     | 1246                 |
| Name     | OJ990625_07.9922.C12.o1.ts             | Method  | TBLASTX:Soybean      |
| Start    | 264                                    | End     | 756                  |
| GI       | none                                   | Score   | 58                   |
| Exons    | 264..368, 396..698, 409..525, 700..756 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22405   | Seq. ID | OJ990625_07.9922.C12 |
| Gene No. | 46652   | Strand  | -                    |
| Start    | 129   | End     | 1246                 |
| Name     | OJ990625_07.9922.C12.o1.tw  | Method  | TBLASTX:Wheat        |
| Start    | 727   | End     | 1246                 |
| GI       | none  | Score   | 235                  |
| Exons    | 727..1191, 728..1042, 856..1191, 1073..1207, 1116..1232, 1177..1245, 1177..1245, 1181..1246 |         |                      |



|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22406   | Seq. ID | OJ990625_07.9922.C14 |
| Gene No.    | 46653   | Strand  | -                    |
| Start       | 455   | End     | 523                  |
| Name        | OJ990625_07.9922.C14.o1.gs  | Method  | GENSCAN              |
| Start       | 455   | End     | 523                  |
| GI          | none  | Score   | .49                  |
| Exons       | 455..523  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22407   | Seq. ID | OJ990625_07.9922.C15 |
| Gene No.    | 46654   | Strand  | +                    |
| Start       | 5810  | End     | 8513                 |
| Name        | OJ990625_07.9922.C15.o2.np  | Method  | AAT/NAP              |
| Start       | 5810  | End     | 8513                 |
| GI          | 6069646   | Score   | 79                   |
| Exons       | 5810..5963, 8474..8513  |         |                      |
| GI Descrip. | (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi 6907112 dbj BAA90639.1  (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa] |         |                      |
|             |   |         |                      |
| Seq. No.    | 22407   | Seq. ID | OJ990625_07.9922.C15 |
| Gene No.    | 46655   | Strand  | -                    |
| Start       | 1   | End     | 4874                 |
| Name        | OJ990625_07.9922.C15.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 2261                 |
| GI          | 2443320   | Score   | 2690                 |
| Exons       | 1..2261   |         |                      |
| GI Descrip. | (D85597) polyprotein [Oryza australiensis]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22407   | Seq. ID | OJ990625_07.9922.C15 |
| Gene No.    | 46655   | Strand  | -                    |
| Start       | 1   | End     | 4874                 |
| Name        | OJ990625_07.9922.C15.o1.gs  | Method  | GENSCAN              |
| Start       | 9   | End     | 4874                 |
| GI          | none  | Score   | .4                   |
| Exons       | 9..397, 2075..2261, 2561..2609, 3273..3445, 4812..4874  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22407   | Seq. ID | OJ990625_07.9922.C15 |
| Gene No.    | 46655   | Strand  | -                    |
| Start       | 1   | End     | 4874                 |
| Name        | OJ990625_07.9922.C15.o1.tw  | Method  | TBLASTX:Wheat        |
| Start       | 129   | End     | 814                  |
| GI          | none  | Score   | 211                  |
| Exons       | 129..410, 169..417, 203..415, 408..785, 410..814, 411..788  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22407   | Seq. ID | OJ990625_07.9922.C15 |
| Gene No.    | 46655   | Strand  | -                    |
| Start       | 1   | End     | 4874                 |
| Name        | OJ990625_07.9922.C15.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 138   | End     | 676                  |
| GI          | none  | Score   | 65                   |
| Exons       | 138..281, 273..350, 410..676, 456..551  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22407   | Seq. ID | OJ990625_07.9922.C15 |
| Gene No.    | 46655   | Strand  | -                    |
| Start       | 1   | End     | 4874                 |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Name        | OJ990625_07.9922.C15.o1.ts  | Method  | TBLASTX:Soybean      |
| Start       | 150   | End     | 580                  |
| GI          | none  | Score   | 81                   |
| Exons       | 150..281, 273..350, 354..404, 410..580, 411..566  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22407   | Seq. ID | OJ990625_07.9922.C15 |
| Gene No.    | 46655   | Strand  | -                    |
| Start       | 1   | End     | 4874                 |
| Name        | OJ990625_07.9922.C15.o2.ts  | Method  | TBLASTX:Soybean      |
| Start       | 590   | End     | 973                  |
| GI          | none  | Score   | 97                   |
| Exons       | 590..814, 839..973  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22407   | Seq. ID | OJ990625_07.9922.C15 |
| Gene No.    | 46655   | Strand  | -                    |
| Start       | 1   | End     | 4874                 |
| Name        | OJ990625_07.9922.C15.o2.tw  | Method  | TBLASTX:Wheat        |
| Start       | 815   | End     | 1294                 |
| GI          | none  | Score   | 113                  |
| Exons       | 815..982, 834..980, 865..990, 865..993, 998..1111, 1030..1110, 1121..1267, 1122..1244, 1265..1294 |         |                      |
|             |   |         |                      |
| Seq. No.    | 22408   | Seq. ID | OJ990625_07.9922.C16 |
| Gene No.    | 46656   | Strand  | +                    |
| Start       | 340   | End     | 438                  |
| Name        | OJ990625_07.9922.C16.o1.gs  | Method  | GENSCAN              |
| Start       | 340   | End     | 438                  |
| GI          | none  | Score   | .98                  |
| Exons       | 340..438  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22408   | Seq. ID | OJ990625_07.9922.C16 |
| Gene No.    | 46657   | Strand  | +                    |
| Start       | 6387  | End     | 7237                 |
| Name        | OJ990625_07.9922.C16.o3.gs  | Method  | GENSCAN              |
| Start       | 6387  | End     | 7237                 |
| GI          | none  | Score   | .97                  |
| Exons       | 6387..6454, 6560..6741, 6828..7237  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22408   | Seq. ID | OJ990625_07.9922.C16 |
| Gene No.    | 46658   | Strand  | -                    |
| Start       | 3426  | End     | 7182                 |
| Name        | OJ990625_07.9922.C16.o1.np  | Method  | AAT/NAP              |
| Start       | 3403  | End     | 7182                 |
| GI          | 3451068   | Score   | 641                  |
| Exons       | 3403..3584, 5285..5363, 5494..5647, 5891..5986, 6346..6612, 7074..7182                            |         |                      |
| GI Descrip. | (AL031326) putative protein [Arabidopsis thaliana]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22408   | Seq. ID | OJ990625_07.9922.C16 |
| Gene No.    | 46658   | Strand  | -                    |
| Start       | 3426  | End     | 7182                 |
| Name        | OJ990625_07.9922.C16.o2.gs  | Method  | GENSCAN              |
| Start       | 3426  | End     | 5612                 |
| GI          | none  | Score   | .94                  |
| Exons       | 3426..3584, 4237..4283, 4794..4878, 5430..5612  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22408   | Seq. ID | OJ990625_07.9922.C16 |

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46659  | Strand | -             |
| Start    | 8106   | End    | 8842          |
| Name     | OJ990625_07.9922.C16.o1.tm   | Method | TBLASTX:Maize |
| Start    | 3408   | End    | 8842          |
| GI       | none   | Score  | 69            |
| Exons    | 3408..3587, 3426..3569, 3448..3588, 8668..8841, 8686..8823, 8702..8842 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22408  | Seq. ID | OJ990625_07.9922.C16 |
| Gene No. | 46659  | Strand  | -                    |
| Start    | 8106   | End     | 8842                 |
| Name     | OJ990625_07.9922.C16.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3433   | End     | 8842                 |
| GI       | none   | Score   | 139                  |
| Exons    | 3433..3588, 3435..3587, 4790..4834, 4825..4881, 8692..8841, 8699..8842 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22408  | Seq. ID | OJ990625_07.9922.C16 |
| Gene No. | 46659  | Strand  | -                    |
| Start    | 8106   | End     | 8842                 |
| Name     | OJ990625_07.9922.C16.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 4810   | End     | 7189                 |
| GI       | none   | Score   | 124                  |
| Exons    | 4810..4881, 5330..5362, 5490..5654, 5491..5649, 5874..5969, 6380..6631, 6384..6614, 7073..7189 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22408  | Seq. ID | OJ990625_07.9922.C16 |
| Gene No. | 46659  | Strand  | -                    |
| Start    | 8106   | End     | 8842                 |
| Name     | OJ990625_07.9922.C16.o1.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 5889   | End     | 7153                 |
| GI       | none   | Score   | 171                  |
| Exons    | 5889..6005, 6380..6631, 6384..6614, 7072..7131, 7073..7153 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22408  | Seq. ID | OJ990625_07.9922.C16 |
| Gene No. | 46659  | Strand  | -                    |
| Start    | 8106   | End     | 8842                 |
| Name     | OJ990625_07.9922.C16.o1.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 6380   | End     | 7153                 |
| GI       | none   | Score   | 172                  |
| Exons    | 6380..6631, 6384..6614, 6604..6651, 7072..7131, 7073..7153 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22408                      | Seq. ID | OJ990625_07.9922.C16 |
| Gene No. | 46659                      | Strand  | -                    |
| Start    | 8106                       | End     | 8842                 |
| Name     | OJ990625_07.9922.C16.o4.gs | Method  | GENSCAN              |
| Start    | 8106                       | End     | 8838                 |
| GI       | none                       | Score   | .87                  |
| Exons    | 8106..8244, 8711..8838     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22409                      | Seq. ID | OJ990625_07.9922.C18 |
| Gene No. | 46660                      | Strand  | -                    |
| Start    | 1                          | End     | 253                  |
| Name     | OJ990625_07.9922.C18.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 253                  |
| GI       | 4581164                    | Score   | 116                  |
| Exons    | 1..253                     |         |                      |

GI Descrip. (AC006220) putative retroelement pol polyprotein [Arabidopsis thaliana]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22409                      | Seq. ID | OJ990625_07.9922.C18 |
| Gene No. | 46660                      | Strand  | -                    |
| Start    | 1                          | End     | 253                  |
| Name     | OJ990625_07.9922.C18.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 5                          | End     | 243                  |
| GI       | none                       | Score   | 70                   |
| Exons    | 5..202, 7..243, 8..118     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22409                      | Seq. ID | OJ990625_07.9922.C18 |
| Gene No. | 46660                      | Strand  | -                    |
| Start    | 1                          | End     | 253                  |
| Name     | OJ990625_07.9922.C18.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 7                          | End     | 246                  |
| GI       | none                       | Score   | 103                  |
| Exons    | 7..246, 32..190            |         |                      |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22410                     | Seq. ID | OJ990625_06.9927.C1 |
| Gene No. | 46661                     | Strand  | +                   |
| Start    | 526                       | End     | 816                 |
| Name     | OJ990625_06.9927.C1.o1.gs | Method  | GENSCAN             |
| Start    | 526                       | End     | 816                 |
| GI       | none                      | Score   | .67                 |
| Exons    | 526..816                  |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22411                     | Seq. ID | OJ990625_06.9927.C2 |
| Gene No. | 46662                     | Strand  |                     |
| Start    | 2900                      | End     | 3034                |
| Name     | OJ990625_06.9927.C2.o1.tm | Method  | TBLASTX:Maize       |
| Start    | 2900                      | End     | 3034                |
| GI       | none                      | Score   | 188                 |
| Exons    | 2900..3034, 2926..3033    |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No.    | 46663  | Strand  | +                   |
| Start       | 1  | End     | 1658                |
| Name        | OJ990625_06.9927.C3.o1.gp                                  | Method  | AAT/GAP             |
| Start       | 1  | End     | 1658                |
| GI          | 2310356  | Score   | 472                 |
| Exons       | 1..24, 308..440, 604..692, 1620..1658                      |         |                     |
| GI Descrip. | 3935138 9.0e-30 (AC005106) T25N20.2 [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46664  | Strand  | +                   |
| Start    | 1614   | End     | 9167                |
| Name     | OJ990625_06.9927.C3.o1.gs  | Method  | GENSCAN             |
| Start    | 1614   | End     | 9167                |
| GI       | none   | Score   | .68                 |
| Exons    | 1614..1858, 3026..3112, 3479..3578, 4066..4279, 4364..4507, 5671..5785, 6359..7149, 7881..8003, 8372..8472, 9000..9167 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22412                     | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46664                     | Strand  | +                   |
| Start    | 1614                      | End     | 9167                |
| Name     | OJ990625_06.9927.C3.o2.gp | Method  | AAT/GAP             |

|             |  |       |      |
|-------------|--|-------|------|
| Start       | 4411   | End   | 5564 |
| GI          | 27473_1.R1084  | Score | 1586 |
| Exons       | 4411..4507, 4831..5564                                       |       |      |
| GI Descrip. | '3935138 9.0e-30 (AC005106) T25N20.2 [Arabidopsis thaliana]' |       |      |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No.    | 46665  | Strand  | +                   |
| Start       | 9793   | End     | 24566               |
| Name        | OJ990625_06.9927.C3.o3.gp  | Method  | AAT/GAP             |
| Start       | 9793   | End     | 13380               |
| GI          | 879_1.R1084  | Score   | 2481                |
| Exons       | 9793..9905, 10345..10416, 10523..10632, 10715..10772, 11197..11460, 11545..11682, 12006..12057, 12267..12346, 12671..12730, 12826..12906, 13041..13380 |         |                     |
| GI Descrip. | '4574139/gb AAD23909.1 AF073697_1 1.0e-166 (AF073697) cysteine synthase [Oryza sativa]'  |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No.    | 46665  | Strand  | +                   |
| Start       | 9793   | End     | 24566               |
| Name        | OJ990625_06.9927.C3.o1.np  | Method  | AAT/NAP             |
| Start       | 10375  | End     | 13130               |
| GI          | 4574139  | Score   | 1351                |
| Exons       | 10375..10416, 10523..10632, 10715..10772, 11197..11460, 11545..11682, 12006..12057, 12267..12346, 12671..12730, 12826..12906, 13041..13130 |         |                     |
| GI Descrip. | (AF073697) cysteine synthase [Oryza sativa]  |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46665  | Strand  | +                   |
| Start    | 9793   | End     | 24566               |
| Name     | OJ990625_06.9927.C3.o3.gs  | Method  | GENSCAN             |
| Start    | 10516  | End     | 24566               |
| GI       | none   | Score   | .86                 |
| Exons    | 10516..10571, 10715..10772, 11197..11460, 11545..11682, 12006..12057, 12267..12346, 12671..12730, 12826..12906, 12997..13059, 13993..14178, 14290..14418, 14638..14781, 14887..15032, 15144..15300, 15796..15945, 16051..16187, 16273..16419, 16542..16794, 17159..17260, 17332..17369, 17588..17714, 17795..17965, 18055..18186, 18317..18423, 18557..18617, 18712..18889, 18987..19192, 19315..19434, 19523..19621, 19763..19978, 20075..20214, 20301..20402, 20489..20603, 20871..20936, 21065..21222, 21336..21432, 21673..21879, 21958..22104, 22177..22247, 22390..22489, 22711..22767, 22850..22930, 23061..23143, 24119..24566 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22412   | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46665   | Strand  | +                   |
| Start    | 9793  | End     | 24566               |
| Name     | OJ990625_06.9927.C3.o2.np   | Method  | AAT/NAP             |
| Start    | 14704   | End     | 23370               |
| GI       | 4887746   | Score   | 4403                |
| Exons    | 14704..14781, 14887..15032, 15144..15300, 15399..15457, 15542..15701, 15796..15945, 16051..16187, 16273..16419, 16542..16643, 16737..16794, 17159..17260, 17332..17369, 17588..17714, 17795..17965, 18055..18186, 18317..18423, 18557..18617, 18712..18889, 18987..19192, 19315..19434, |         |                     |

19523..19621, 19763..19978, 20075..20214, 20301..20402,  
 20489..20640, 20874..20936, 21065..21235, 21336..21495,  
 21677..21879, 21958..22104, 22177..22247, 22390..22489,  
 22578..22634, 22711..22767, 22850..22930, 23061..23143,  
 23246..23370

GI Descrip. (AC006533) putative unconventional myosin [Arabidopsis thaliana]

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22412                     | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46666                     | Strand  | -                   |
| Start    | 9755                      | End     | 10165               |
| Name     | OJ990625_06.9927.C3.o2.gs | Method  | GENSCAN             |
| Start    | 9755                      | End     | 10165               |
| GI       | none                      | Score   | 1                   |
| Exons    | 9755..10165               |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o8.tm  | Method  | TBLASTX:Maize       |
| Start    | 302  | End     | 733                 |
| GI       | none   | Score   | 191                 |
| Exons    | 302..448, 305..442, 379..444, 534..626, 587..628, 639..695, 641..733, 652..696 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o8.ts  | Method  | TBLASTX:Soybean     |
| Start    | 305  | End     | 4230                |
| GI       | none   | Score   | 77                  |
| Exons    | 305..400, 1617..1859, 1617..1856, 1739..1858, 3026..3115, 3027..3113, 3477..3575, 3483..3575, 3485..3589, 4056..4214, 4069..4230 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o6.tm  | Method  | TBLASTX:Maize       |
| Start    | 1639   | End     | 4269                |
| GI       | none   | Score   | 342                 |
| Exons    | 1639..1857, 1640..1858, 1641..1859, 3019..3105, 3021..3113, 3021..3110, 3477..3581, 3478..3576, 3479..3577, 4056..4184, 4066..4182, 4156..4269, 4185..4241 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o5.ts                                  | Method  | TBLASTX:Soybean     |
| Start    | 5751   | End     | 6687                |
| GI       | none   | Score   | 72                  |
| Exons    | 5751..5825, 5752..5823, 6432..6560, 6573..6686, 6610..6687 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22412                     | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667                     | Strand  | -                   |
| Start    | 25428                     | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o1.tw | Method  | TBLASTX:Wheat       |
| Start    | 10326                     | End     | 11418               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| GI       | none   | Score   | 165                 |
| Exons    | 10326..10418, 10520..10633, 10522..10632, 10712..10768,<br>10713..10772, 11196..11417, 11196..11417, 11197..11418  |         |                     |
|          |  |         |                     |
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.ol.tm  | Method  | TBLASTX:Maize       |
| Start    | 10374  | End     | 13136               |
| GI       | none   | Score   | 37                  |
| Exons    | 10374..10415, 10375..10413, 10520..10633, 10522..10632,<br>10712..10768, 10713..10769, 11196..11459, 11196..11459,<br>11197..11463, 11197..11463, 11542..11700, 11550..11612,<br>11652..11699, 12000..12059, 12265..12309, 12266..12361,<br>12670..12732, 12671..12733, 12825..12854, 12825..12908,<br>12880..12909, 13040..13129, 13041..13136  |         |                     |
|          |  |         |                     |
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.ol.ts  | Method  | TBLASTX:Soybean     |
| Start    | 10520  | End     | 13135               |
| GI       | none   | Score   | 166                 |
| Exons    | 10520..10633, 10522..10632, 10526..10633, 10712..10768,<br>10713..10772, 11196..11459, 11196..11459, 11197..11463,<br>11542..11700, 11542..11649, 11543..11674, 11649..11699,<br>12000..12059, 12265..12309, 12266..12361, 12671..12733,<br>12673..12732, 12810..12863, 12819..12905, 12880..12906,<br>13043..13135, 13044..13133  |         |                     |
|          |  |         |                     |
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o2.tc  | Method  | TBLASTX:Cress       |
| Start    | 10520  | End     | 13136               |
| GI       | none   | Score   | 159                 |
| Exons    | 10520..10633, 10522..10632, 10536..10637, 10713..10772,<br>10713..10772, 10714..10773, 11192..11374, 11196..11321,<br>11196..11456, 11197..11463, 11536..11631, 11542..11700,<br>11649..11699, 11991..12059, 12011..12058, 12266..12361,<br>12266..12346, 12670..12732, 12671..12733, 12825..12905,<br>13044..13136, 13049..13135  |         |                     |
|          |  |         |                     |
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.ol.tc  | Method  | TBLASTX:Cress       |
| Start    | 14302  | End     | 23312               |
| GI       | none   | Score   | 130                 |
| Exons    | 14302..14421, 14634..14777, 14638..14781, 14672..14788,<br>14887..15033, 14892..15023, 14905..15045, 15141..15299,<br>15142..15300, 15398..15457, 15399..15455, 15536..15703,<br>15540..15701, 15550..15702, 15793..15945, 15795..15824,<br>15891..15947, 16041..16187, 16048..16185, 16267..16446,<br>16274..16420, 16535..16648, 16540..16647, 16543..16668,<br>16723..16794, 16734..16790, 17117..17260, 17156..17251,<br>17329..17367, 17588..17719, 17589..17720, 17794..17919, |         |                     |

17795..17929, 17899..17964, 17906..17965, 18054..18185,  
 18073..18186, 18316..18426, 18317..18418, 18551..18616,  
 18555..18620, 18708..18890, 18709..18891, 18991..19197,  
 18992..19192, 19312..19434, 19314..19433, 19472..19621,  
 19766..19903, 21067..21252, 21068..21235, 21753..21848,  
 21754..21879, 22018..22122, 22177..22272, 22387..22485,  
 22388..22486, 22559..22636, 22560..22637, 22711..22770,  
 22841..22933, 23058..23141, 23232..23312

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22412   | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667   | Strand  | -                   |
| Start    | 25428   | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o3.ts   | Method  | TBLASTX:Soybean     |
| Start    | 14692   | End     | 15683               |
| GI       | none  | Score   | 91                  |
| Exons    | 14692..14781, 14887..14937, 15139..15285, 15144..15269,<br>15394..15429, 15399..15455, 15509..15634, 15540..15683 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22412   | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667   | Strand  | -                   |
| Start    | 25428   | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o7.tm   | Method  | TBLASTX:Maize       |
| Start    | 14887   | End     | 15698               |
| GI       | none  | Score   | 49                  |
| Exons    | 14887..14934, 14995..15024, 15138..15269, 15148..15270,<br>15378..15455, 15540..15698 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22412   | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667   | Strand  | -                   |
| Start    | 25428   | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o5.tm   | Method  | TBLASTX:Maize       |
| Start    | 16072   | End     | 16569               |
| GI       | none  | Score   | 177                 |
| Exons    | 16072..16188, 16074..16193, 16078..16197, 16270..16446,<br>16274..16420, 16543..16569 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 17588  | End     | 18156               |
| GI       | none   | Score   | 183                 |
| Exons    | 17588..17716, 17589..17717, 17775..17858, 17792..17965,<br>17794..17964, 17801..17965, 17917..17973, 18053..18154,<br>18054..18155, 18054..18155, 18073..18156 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22412   | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667   | Strand  | -                   |
| Start    | 25428   | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o4.ts   | Method  | TBLASTX:Soybean     |
| Start    | 17625   | End     | 17940               |
| GI       | none  | Score   | 143                 |
| Exons    | 17625..17720, 17627..17719, 17795..17836, 17815..17940,<br>17837..17938 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22412 | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667 | Strand  | -                   |



|       |  |        |                 |
|-------|--|--------|-----------------|
| Start | 25428  | End    | 26216           |
| Name  | OJ990625_06.9927.C3.o6.ts  | Method | TBLASTX:Soybean |
| Start | 18053  | End    | 18427           |
| GI    | none   | Score  | 74              |
| Exons | 18053..18175, 18057..18194, 18073..18186, 18277..18393, 18290..18427 |        |                 |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 18319  | End     | 19564               |
| GI       | none   | Score   | 133                 |
| Exons    | 18319..18420, 18320..18421, 18555..18620, 18555..18617, 18706..18849, 18709..18891, 18711..18908, 18991..19191, 18992..19192, 19043..19195, 19306..19434, 19311..19433, 19312..19422, 19463..19564 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o7.ts  | Method  | TBLASTX:Soybean     |
| Start    | 19100  | End     | 20361               |
| GI       | none   | Score   | 106                 |
| Exons    | 19100..19192, 19312..19434, 19314..19433, 19472..19621, 19485..19622, 19762..19971, 19762..19800, 19766..19978, 19766..19834, 19900..19932, 19901..19978, 20283..20345, 20299..20361 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412  | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667  | Strand  | -                   |
| Start    | 25428  | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 21392  | End     | 23099               |
| GI       | none   | Score   | 95                  |
| Exons    | 21392..21490, 21394..21492, 21400..21489, 21687..21881, 21687..21905, 21688..21906, 21953..22093, 21954..22121, 21954..22088, 21955..22122, 21955..22122, 22174..22245, 22176..22247, 22177..22284, 22380..22487, 22387..22488, 22388..22489, 22391..22489, 22575..22637, 22576..22638, 22576..22635, 22577..22636, 22699..22770, 22701..22769, 22842..22931, 22842..22931, 22849..22941, 22850..22933, 23058..23099, 23060..23098 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22412                                    | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667                                    | Strand  | -                   |
| Start    | 25428                                    | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o2.tw                | Method  | TBLASTX:Wheat       |
| Start    | 21750                                    | End     | 22122               |
| GI       | none                                     | Score   | 149                 |
| Exons    | 21750..21875, 21751..21879, 21979..22122 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22412                     | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667                     | Strand  | -                   |
| Start    | 25428                     | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o2.ts | Method  | TBLASTX:Soybean     |
| Start    | 21772                     | End     | 23354               |

|       |   |       |     |
|-------|---|-------|-----|
| GI    | none  | Score | 148 |
| Exons | 21772..21879, 21774..21878, 22012..22104, 22180..22284,<br>22387..22488, 22388..22489, 22562..22636, 22575..22637,<br>22696..22785, 22711..22770, 22840..22935, 22841..22933,<br>23061..23141, 23232..23354 |       |     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22412                      | Seq. ID | OJ990625_06.9927.C3 |
| Gene No. | 46667                      | Strand  | -                   |
| Start    | 25428                      | End     | 26216               |
| Name     | OJ990625_06.9927.C3.o4.gs  | Method  | GENSCAN             |
| Start    | 25428                      | End     | 26216               |
| GI       | none                       | Score   | .77                 |
| Exons    | 25428..25502, 26181..26216 |         |                     |

|          |                                      |         |                     |
|----------|--------------------------------------|---------|---------------------|
| Seq. No. | 22413                                | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46668                                | Strand  | +                   |
| Start    | 1                                    | End     | 3585                |
| Name     | OJ990625_06.9927.C4.o1.gp            | Method  | AAT/GAP             |
| Start    | 1                                    | End     | 872                 |
| GI       | none                                 | Score   | 814                 |
| Exons    | 1..178, 409..482, 590..749, 832..872 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22413   | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46668   | Strand  | +                   |
| Start    | 1   | End     | 3585                |
| Name     | OJ990625_06.9927.C4.o1.gs   | Method  | GENSCAN             |
| Start    | 360   | End     | 3585                |
| GI       | none  | Score   | .68                 |
| Exons    | 360..482, 590..749, 832..899, 1125..1670, 1922..2509,<br>2589..2874, 3110..3334, 3389..3585 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22413   | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46668   | Strand  | +                   |
| Start    | 1   | End     | 3585                |
| Name     | OJ990625_06.9927.C4.o1.np   | Method  | AAT/NAP             |
| Start    | 381   | End     | 3318                |
| GI       | 4204265   | Score   | 1008                |
| Exons    | 381..508, 625..795, 1148..1428, 1483..1703, 1937..2509,<br>2589..2801, 3154..3318 |         |                     |

GI Descrip. (AC005223) 45643 [Arabidopsis thaliana]

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22413                     | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46668                     | Strand  | +                   |
| Start    | 1                         | End     | 3585                |
| Name     | OJ990625_06.9927.C4.o2.gp | Method  | AAT/GAP             |
| Start    | 1618                      | End     | 2456                |
| GI       | 12993_1.R1084             | Score   | 1148                |
| Exons    | 1618..1670, 1922..2456    |         |                     |

GI Descrip. '4204265 5.0e-42 (AC005223) 45643 [Arabidopsis thaliana]'

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22413                     | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46669                     | Strand  | +                   |
| Start    | 9659                      | End     | 9980                |
| Name     | OJ990625_06.9927.C4.o3.gs | Method  | GENSCAN             |
| Start    | 9659                      | End     | 9980                |
| GI       | none                      | Score   | .99                 |
| Exons    | 9659..9812, 9913..9980    |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22413   | Seq. ID | OJ990625_06.9927.C4 |
| Gene No.    | 46670   | Strand  | +                   |
| Start       | 10685   | End     | 11488               |
| Name        | OJ990625_06.9927.C4.o2.np   | Method  | AAT/NAP             |
| Start       | 10673   | End     | 11485               |
| GI          | 6223643   | Score   | 687                 |
| Exons       | 10673..11485  |         |                     |
| GI Descrip. | (AC011698) putative short-chain type dehydrogenase/reductase [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22413                     | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46670                     | Strand  | +                   |
| Start    | 10685                     | End     | 11488               |
| Name     | OJ990625_06.9927.C4.o4.gs | Method  | GENSCAN             |
| Start    | 10685                     | End     | 11488               |
| GI       | none                      | Score   | .86                 |
| Exons    | 10685..11488              |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No.    | 46671  | Strand  | +                   |
| Start       | 14474  | End     | 17552               |
| Name        | OJ990625_06.9927.C4.o3.np  | Method  | AAT/NAP             |
| Start       | 14373  | End     | 17552               |
| GI          | 4585982  | Score   | 619                 |
| Exons       | 14373..14590, 15223..15286, 15932..16182, 16285..16323, 17445..17552 |         |                     |
| GI Descrip. | (AC005287) Unknown protein [Arabidopsis thaliana]                    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46671  | Strand  | +                   |
| Start    | 14474  | End     | 17552               |
| Name     | OJ990625_06.9927.C4.o6.gs  | Method  | GENSCAN             |
| Start    | 14474  | End     | 16432               |
| GI       | none   | Score   | .87                 |
| Exons    | 14474..14590, 15223..15286, 15932..16182, 16285..16323, 16412..16432 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No.    | 46672  | Strand  | -                   |
| Start       | 3218   | End     | 6066                |
| Name        | OJ990625_06.9927.C4.o3.gp  | Method  | AAT/GAP             |
| Start       | 3218   | End     | 6007                |
| GI          | 64_1.R1084   | Score   | 1062                |
| Exons       | 3218..3298, 3422..3905, 3957..4025, 5987..6007                     |         |                     |
| GI Descrip. | '4126687/dbj BAA36695  0.0e+00 (AB016501) glutelin [Oryza sativa]' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22413                     | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46672                     | Strand  | -                   |
| Start    | 3218                      | End     | 6066                |
| Name     | OJ990625_06.9927.C4.o2.gs | Method  | GENSCAN             |
| Start    | 5324                      | End     | 6066                |
| GI       | none                      | Score   | .49                 |
| Exons    | 5324..5453, 6059..6066    |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22413 | Seq. ID | OJ990625_06.9927.C4 |
|----------|-------|---------|---------------------|

|          |                           |        |         |
|----------|---------------------------|--------|---------|
| Gene No. | 46673                     | Strand | -       |
| Start    | 13679                     | End    | 14188   |
| Name     | OJ990625_06.9927.C4.o5.gs | Method | GENSCAN |
| Start    | 13679                     | End    | 14188   |
| GI       | none                      | Score  | .76     |
| Exons    | 13679..14188              |        |         |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674  | Strand  | -                   |
| Start    | 17695  | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 396  | End     | 2822                |
| GI       | none   | Score   | 54                  |
| Exons    | 396..503, 607..750, 608..751, 650..757, 827..898, 831..899, 832..900, 1002..1028, 1002..1028, 1147..1302, 1148..1498, 1149..1520, 1342..1533, 1479..1670, 1498..1671, 1500..1670, 1598..1672, 1920..2279, 1921..2280, 1922..2290, 2279..2515, 2283..2510, 2284..2517, 2284..2520, 2588..2803, 2589..2822 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674  | Strand  | -                   |
| Start    | 17695  | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 1518   | End     | 3287                |
| GI       | none   | Score   | 77                  |
| Exons    | 1518..1658, 1997..2020, 2014..2091, 2015..2092, 2081..2164, 2101..2148, 2111..2284, 2137..2229, 2262..2489, 2275..2520, 2276..2515, 2326..2523, 2588..2803, 2589..2804, 2662..2817, 3151..3285, 3183..3287 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674  | Strand  | -                   |
| Start    | 17695  | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 2014   | End     | 3282                |
| GI       | none   | Score   | 86                  |
| Exons    | 2014..2088, 2015..2092, 2123..2218, 2161..2217, 2279..2509, 2289..2474, 2294..2515, 2296..2520, 2570..2803, 2588..2803, 2589..2822, 3151..3282, 3165..3281 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674  | Strand  | -                   |
| Start    | 17695  | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 2585   | End     | 3301                |
| GI       | none   | Score   | 242                 |
| Exons    | 2585..2797, 2588..2800, 2589..2807, 2589..2801, 3151..3231, 3154..3300, 3158..3301, 3165..3284 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674  | Strand  | -                   |
| Start    | 17695  | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o4.tm                      | Method  | TBLASTX:Maize       |
| Start    | 3151   | End     | 3301                |
| GI       | none   | Score   | 209                 |
| Exons    | 3151..3300, 3151..3231, 3152..3301, 3165..3299 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22413                                    | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674                                    | Strand  | -                   |
| Start    | 17695                                    | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o2.tc                | Method  | TBLASTX:Cress       |
| Start    | 10775                                    | End     | 11412               |
| GI       | none                                     | Score   | 72                  |
| Exons    | 10775..10861, 10904..11404, 10993..11412 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674  | Strand  | -                   |
| Start    | 17695  | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 10775  | End     | 11337               |
| GI       | none   | Score   | 70                  |
| Exons    | 10775..10864, 10898..11305, 10987..11106, 11075..11131, 11237..11305, 11281..11337 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22413                      | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674                      | Strand  | -                   |
| Start    | 17695                      | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 11009                      | End     | 11491               |
| GI       | none                       | Score   | 615                 |
| Exons    | 11009..11491, 11080..11490 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674  | Strand  | -                   |
| Start    | 17695  | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 13939  | End     | 17561               |
| GI       | none   | Score   | 81                  |
| Exons    | 13939..13998, 13940..13990, 13946..14008, 14080..14157, 14089..14160, 14392..14493, 14399..14491, 14482..14589, 14483..14593, 15223..15282, 15223..15285, 15912..16181, 15931..16188, 15931..16185, 16267..16323, 16283..16318, 17436..17561, 17450..17557 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22413  | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674  | Strand  | -                   |
| Start    | 17695  | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 15912  | End     | 17533               |
| GI       | none   | Score   | 95                  |
| Exons    | 15912..16025, 15931..16035, 16039..16122, 16089..16169, 16090..16188, 16099..16182, 16267..16323, 16293..16319, 16301..16321, 17436..17531, 17450..17533 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22413                     | Seq. ID | OJ990625_06.9927.C4 |
| Gene No. | 46674                     | Strand  | -                   |
| Start    | 17695                     | End     | 17810               |
| Name     | OJ990625_06.9927.C4.o7.gs | Method  | GENSCAN             |
| Start    | 17695                     | End     | 17810               |
| GI       | none                      | Score   | .49                 |
| Exons    | 17695..17810              |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22414 | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46675 | Strand  | +                   |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 7491   | End    | 11414   |
| Name        | OJ990625_06.9927.C5.o1.gp  | Method | AAT/GAP |
| Start       | 7367   | End    | 8175    |
| GI          | uC-osrocyp005g06b1   | Score  | 952     |
| Exons       | 7367..7751, 8071..8175   |        |         |
| GI Descrip. | '280523/pir  S28282 1.0e-24 hypothetical protein B0464.5 - Caenorhabditis elegans' |        |         |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46675  | Strand  | +                   |
| Start    | 7491   | End     | 11414               |
| Name     | OJ990625_06.9927.C5.o2.gs                          | Method  | GENSCAN             |
| Start    | 7491   | End     | 11110               |
| GI       | none   | Score   | .63                 |
| Exons    | 7491..7751, 8071..8710, 10480..10586, 10667..11110 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46675   | Strand  | +                   |
| Start       | 7491  | End     | 11414               |
| Name        | OJ990625_06.9927.C5.o1.np                                       | Method  | AAT/NAP             |
| Start       | 7569  | End     | 10957               |
| GI          | 3367568   | Score   | 1132                |
| Exons       | 7569..7751, 8071..8664, 8764..8988, 10539..10586, 10667..10957  |         |                     |
| GI Descrip. | (AL031135) protein kinase - like protein [Arabidopsis thaliana] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46675   | Strand  | +                   |
| Start       | 7491  | End     | 11414               |
| Name        | OJ990625_06.9927.C5.o2.gp   | Method  | AAT/GAP             |
| Start       | 8289  | End     | 8650                |
| GI          | uC-osf1M202075h07b1   | Score   | 681                 |
| Exons       | 8289..8650  |         |                     |
| GI Descrip. | '3367568/emb CAA20020  9.0e-15 (AL031135) protein kinase - like protein [Arabidopsis thaliana]' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46675   | Strand  | +                   |
| Start       | 7491  | End     | 11414               |
| Name        | OJ990625_06.9927.C5.o4.gp   | Method  | AAT/GAP             |
| Start       | 10803   | End     | 11414               |
| GI          | 17156_1.R1084   | Score   | 1183                |
| Exons       | 10803..11414  |         |                     |
| GI Descrip. | '4507221/ref NP_003129.1 pSRPK2  2.0e-13 SFRS protein kinase 2 >gi_1857944 (U88666) serine kinase SRPK2 [Homo sapiens]' |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22414                      | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46676                      | Strand  | +                   |
| Start    | 13096                      | End     | 13820               |
| Name     | OJ990625_06.9927.C5.o5.gp  | Method  | AAT/GAP             |
| Start    | 13045                      | End     | 13554               |
| GI       | 2428175                    | Score   | 679                 |
| Exons    | 13045..13167, 13269..13554 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22414                     | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46676                     | Strand  | +                   |
| Start    | 13096                     | End     | 13820               |
| Name     | OJ990625_06.9927.C5.o4.gs | Method  | GENSCAN             |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 13096  | End   | 13820 |
| GI    | none   | Score | .99   |
| Exons | 13096..13167, 13198..13248, 13269..13532, 13641..13820 |       |       |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46677  | Strand  | +                   |
| Start    | 28351  | End     | 33686               |
| Name     | OJ990625_06.9927.C5.o6.gs  | Method  | GENSCAN             |
| Start    | 28351  | End     | 32382               |
| GI       | none   | Score   | .85                 |
| Exons    | 28351..28377, 28977..29136, 29172..29413, 29509..29627, 29764..29842, 30820..30894, 31350..31687, 31917..32040, 32350..32382 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46677  | Strand  | +                   |
| Start       | 28351  | End     | 33686               |
| Name        | OJ990625_06.9927.C5.o8.gp  | Method  | AAT/GAP             |
| Start       | 29199  | End     | 30894               |
| GI          | 54499_1.R1084  | Score   | 869                 |
| Exons       | 29199..29413, 29509..29627, 29764..29842, 30820..30894                                 |         |                     |
| GI Descrip. | '2245131/emb CAB10552.1  1.0e-09 (Z97344) hypothetical protein [Arabidopsis thaliana]' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46677  | Strand  | +                   |
| Start       | 28351  | End     | 33686               |
| Name        | OJ990625_06.9927.C5.o5.np  | Method  | AAT/NAP             |
| Start       | 29524  | End     | 33686               |
| GI          | 2245131  | Score   | 376                 |
| Exons       | 29524..29654, 29764..29842, 30820..30912, 31350..31687, 31917..32044, 33628..33686 |         |                     |
| GI Descrip. | (Z97344) hypothetical protein [Arabidopsis thaliana]                               |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46677   | Strand  | +                   |
| Start       | 28351   | End     | 33686               |
| Name        | OJ990625_06.9927.C5.o9.gp   | Method  | AAT/GAP             |
| Start       | 32007   | End     | 33174               |
| GI          | LIB3431-010-P1-N1-A4  | Score   | 608                 |
| Exons       | 32007..32040, 32875..33174  |         |                     |
| GI Descrip. | '4176420/dbj BAA37167  2.0e-11 (AB008097) cytochrome P450 [Arabidopsis thaliana]' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46678   | Strand  | +                   |
| Start       | 34438   | End     | 35932               |
| Name        | OJ990625_06.9927.C5.o6.np                                       | Method  | AAT/NAP             |
| Start       | 34420   | End     | 35925               |
| GI          | 6598436   | Score   | 575                 |
| Exons       | 34420..34698, 34768..35614, 35646..35925                        |         |                     |
| GI Descrip. | (AC004683) putative ammonium transporter [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22414                     | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46678                     | Strand  | +                   |
| Start    | 34438                     | End     | 35932               |
| Name     | OJ990625_06.9927.C5.o7.gs | Method  | GENSCAN             |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 34438                                    | End   | 35932 |
| GI    | none                                     | Score | .53   |
| Exons | 34438..34563, 35109..35402, 35453..35932 |       |       |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22414                     | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46679                     | Strand  | -                   |
| Start    | 619                       | End     | 2201                |
| Name     | OJ990625_06.9927.C5.o1.gs | Method  | GENSCAN             |
| Start    | 619                       | End     | 2201                |
| GI       | none                      | Score   | .96                 |
| Exons    | 619..810, 1158..2201      |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22414                      | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46680                      | Strand  | -                   |
| Start    | 11846                      | End     | 12702               |
| Name     | OJ990625_06.9927.C5.o3.gs  | Method  | GENSCAN             |
| Start    | 11846                      | End     | 12702               |
| GI       | none                       | Score   | .87                 |
| Exons    | 11846..12080, 12179..12702 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o15.tm                         | Method  | TBLASTX:Maize       |
| Start    | 619  | End     | 1217                |
| GI       | none   | Score   | 69                  |
| Exons    | 619..672, 620..670, 628..831, 668..820, 1152..1217 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o5.tm                      | Method  | TBLASTX:Maize       |
| Start    | 1584   | End     | 1973                |
| GI       | none   | Score   | 70                  |
| Exons    | 1584..1679, 1624..1674, 1722..1973, 1723..1950 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22414                      | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681                      | Strand  | -                   |
| Start    | 14607                      | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o10.ts | Method  | TBLASTX:Soybean     |
| Start    | 1752                       | End     | 1973                |
| GI       | none                       | Score   | 116                 |
| Exons    | 1752..1973, 1813..1950     |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o1.ts                                  | Method  | TBLASTX:Soybean     |
| Start    | 7614   | End     | 8444                |
| GI       | none   | Score   | 225                 |
| Exons    | 7614..7751, 7637..7750, 8074..8442, 8074..8418, 8076..8444 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22414                      | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681                      | Strand  | -                   |
| Start    | 14607                      | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o10.tm | Method  | TBLASTX:Maize       |
| Start    | 7614                       | End     | 8260                |



|       |  |       |     |
|-------|--|-------|-----|
| GI    | none   | Score | 246 |
| Exons | 7614..7751, 7637..7750, 7670..7753, 8070..8246, 8071..8250, 8186..8260 |       |     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o8.tc                      | Method  | TBLASTX:Cress       |
| Start    | 7614   | End     | 8190                |
| GI       | none   | Score   | 229                 |
| Exons    | 7614..7751, 7640..7741, 8070..8189, 8071..8190 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22414                     | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681                     | Strand  | -                   |
| Start    | 14607                     | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o2.tw | Method  | TBLASTX:Wheat       |
| Start    | 8262                      | End     | 8463                |
| GI       | none                      | Score   | 227                 |
| Exons    | 8262..8462, 8263..8463    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 8271   | End     | 8895                |
| GI       | none   | Score   | 544                 |
| Exons    | 8271..8663, 8272..8688, 8272..8691, 8273..8695, 8733..8894, 8751..8894, 8752..8895, 8752..8895 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22414                     | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681                     | Strand  | -                   |
| Start    | 14607                     | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o6.tc | Method  | TBLASTX:Cress       |
| Start    | 8290                      | End     | 8486                |
| GI       | none                      | Score   | 257                 |
| Exons    | 8290..8478, 8292..8486    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 8744   | End     | 10720               |
| GI       | none   | Score   | 387                 |
| Exons    | 8744..8863, 8760..8945, 8761..8988, 8900..8998, 8900..8989, 10536..10589, 10538..10585, 10666..10716, 10667..10720 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22414                     | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681                     | Strand  | -                   |
| Start    | 14607                     | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o4.ts | Method  | TBLASTX:Soybean     |
| Start    | 8766                      | End     | 8946                |
| GI       | none                      | Score   | 319                 |
| Exons    | 8766..8945, 8767..8946    |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22414 | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681 | Strand  | -                   |
| Start    | 14607 | End     | 26487               |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990625_06.9927.C5.o2.tm  | Method | TBLASTX:Maize |
| Start | 8929   | End    | 11107         |
| GI    | none   | Score  | 70            |
| Exons | 8929..8967, 8965..8988, 10521..10553, 10522..10584,<br>10536..10589, 10538..10585, 10666..10917, 10667..10987,<br>10724..10918, 10907..11080, 10951..11076, 11078..11107 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 8947   | End     | 11035               |
| GI       | none   | Score   | 77                  |
| Exons    | 8947..8988, 8951..8995, 10536..10589, 10538..10582,<br>10665..10913, 10666..10902, 10666..10914, 10667..10915,<br>10936..11034, 10958..11035 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o4.tc   | Method  | TBLASTX:Cress       |
| Start    | 11843   | End     | 12570               |
| GI       | none  | Score   | 113                 |
| Exons    | 11843..12076, 11868..11975, 12003..12107, 12027..12077,<br>12214..12357, 12221..12340, 12418..12570 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o1.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 11846  | End     | 12345               |
| GI       | none   | Score   | 172                 |
| Exons    | 11846..12121, 11864..12082, 12214..12345, 12215..12331 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o7.tm   | Method  | TBLASTX:Maize       |
| Start    | 11864   | End     | 12573               |
| GI       | none  | Score   | 86                  |
| Exons    | 11864..12127, 11868..11975, 11888..12073, 12018..12077,<br>12220..12357, 12221..12337, 12418..12573 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o8.ts   | Method  | TBLASTX:Soybean     |
| Start    | 11864   | End     | 12570               |
| GI       | none  | Score   | 116                 |
| Exons    | 11864..12076, 11868..12077, 12214..12357, 12221..12337,<br>12418..12570 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22414                     | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681                     | Strand  | -                   |
| Start    | 14607                     | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o9.tc | Method  | TBLASTX:Cress       |
| Start    | 13208                     | End     | 13505               |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| GI          | none   | Score   | 217                 |
| Exons       | 13208..13504, 13263..13505   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46681  | Strand  | -                   |
| Start       | 14607  | End     | 26487               |
| Name        | OJ990625_06.9927.C5.o13.ts   | Method  | TBLASTX:Soybean     |
| Start       | 13262  | End     | 13496               |
| GI          | none   | Score   | 160                 |
| Exons       | 13262..13423, 13263..13418, 13413..13496   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46681  | Strand  | -                   |
| Start       | 14607  | End     | 26487               |
| Name        | OJ990625_06.9927.C5.o6.gp  | Method  | AAT/GAP             |
| Start       | 14309  | End     | 15228               |
| GI          | 18064_1.R1084  | Score   | 976                 |
| Exons       | 14309..14759, 15151..15228   |         |                     |
| GI Descrip. | '2245000/emb CAB10420.1  1.0e-20 (Z97341) LET1 like protein [Arabidopsis thaliana]'  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46681  | Strand  | -                   |
| Start       | 14607  | End     | 26487               |
| Name        | OJ990625_06.9927.C5.o17.ts   | Method  | TBLASTX:Soybean     |
| Start       | 14549  | End     | 15270               |
| GI          | none   | Score   | 143                 |
| Exons       | 14549..14590, 14607..14768, 14608..14760, 15148..15270, 15149..15265   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46681  | Strand  | -                   |
| Start       | 14607  | End     | 26487               |
| Name        | OJ990625_06.9927.C5.o5.gs  | Method  | GENSCAN             |
| Start       | 14607  | End     | 26413               |
| GI          | none   | Score   | .77                 |
| Exons       | 14607..14759, 15151..15242, 15340..15466, 15589..15742, 15995..16044, 16130..16280, 16390..16516, 16922..17078, 17282..17435, 18343..18431, 18476..18559, 18579..18693, 20197..20426, 20860..20970, 21063..21215, 21384..21443, 21997..22145, 22237..22306, 22407..22478, 23213..23407, 23985..24155, 24747..24935, 25058..25153, 25416..25646, 25750..25888, 25938..26092, 26195..26413 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46681  | Strand  | -                   |
| Start       | 14607  | End     | 26487               |
| Name        | OJ990625_06.9927.C5.o2.np  | Method  | AAT/NAP             |
| Start       | 14610  | End     | 23094               |
| GI          | 2245000  | Score   | 600                 |
| Exons       | 14610..14749, 15138..15219, 15572..15795, 16922..17040, 17282..17435, 17522..17592, 18467..18606, 23044..23094   |         |                     |
| GI Descrip. | (Z97341) LET1 like protein [Arabidopsis thaliana]  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46681  | Strand  | -                   |
| Start       | 14607  | End     | 26487               |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990625_06.9927.C5.o9.tm  | Method | TBLASTX:Maize |
| Start | 15132  | End    | 15799         |
| GI    | none   | Score  | 74            |
| Exons | 15132..15248, 15148..15270, 15152..15265, 15333..15434,<br>15335..15490, 15338..15478, 15482..15616, 15566..15604,<br>15600..15770, 15607..15798, 15608..15799 |        |               |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o6.ts   | Method  | TBLASTX:Soybean     |
| Start    | 15590   | End     | 17566               |
| GI       | none  | Score   | 89                  |
| Exons    | 15590..15616, 15610..15741, 16130..16183, 16193..16279,<br>16202..16279, 16392..16517, 16432..16518, 16914..17111,<br>16999..17112, 17267..17437, 17273..17437, 17292..17438,<br>17522..17566, 17524..17562 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o17.tm  | Method  | TBLASTX:Maize       |
| Start    | 16152   | End     | 16418               |
| GI       | none  | Score   | 102                 |
| Exons    | 16152..16271, 16153..16275, 16154..16282, 16163..16267,<br>16389..16418 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46681  | Strand  | -                   |
| Start       | 14607  | End     | 26487               |
| Name        | OJ990625_06.9927.C5.o7.gp  | Method  | AAT/GAP             |
| Start       | 16176  | End     | 18656               |
| GI          | 18847_1.R1084  | Score   | 1495                |
| Exons       | 16176..16280, 16390..16516, 16922..17108, 17282..17435,<br>17522..17604, 18476..18656            |         |                     |
| GI Descrip. | '4581520/emb CAB40177.1  5.0e-38 (AL049559) hypothetical protein<br>[Schizosaccharomyces pombe]' |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o5.tc   | Method  | TBLASTX:Cress       |
| Start    | 16205   | End     | 17112               |
| GI       | none  | Score   | 72                  |
| Exons    | 16205..16282, 16205..16282, 16389..16517, 16417..16518,<br>16902..17111, 16914..17111, 16993..17112 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o13.tm  | Method  | TBLASTX:Maize       |
| Start    | 16455   | End     | 17369               |
| GI       | none  | Score   | 79                  |
| Exons    | 16455..16517, 16456..16518, 16914..17114, 16915..17109,<br>16920..17135, 17273..17365, 17274..17369, 17280..17369 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22414 | Seq. ID | OJ990625_06.9927.C5 |
|----------|-------|---------|---------------------|

|             |   |        |         |
|-------------|---|--------|---------|
| Gene No.    | 46681   | Strand | -       |
| Start       | 14607   | End    | 26487   |
| Name        | OJ990625_06.9927.C5.o3.np   | Method | AAT/NAP |
| Start       | 19983   | End    | 25132   |
| GI          | 6598524   | Score  | 2534    |
| Exons       | 19983..20426, 20860..20970, 21063..21215, 21384..21443,<br>21530..21838, 21997..22145, 22237..22306, 22407..22610,<br>23213..23407, 23621..23892, 23991..24155, 24238..24368,<br>24458..24617, 24747..24935, 25058..25132 |        |         |
| GI Descrip. | (AC006200) putative ATP-dependent RNA helicase A [Arabidopsis thaliana]   |        |         |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o3.tm   | Method  | TBLASTX:Maize       |
| Start    | 20046   | End     | 20405               |
| GI       | none  | Score   | 147                 |
| Exons    | 20046..20297, 20051..20218, 20095..20253, 20211..20297,<br>20283..20405, 20283..20405 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o14.tm  | Method  | TBLASTX:Maize       |
| Start    | 20842   | End     | 21129               |
| GI       | none  | Score   | 110                 |
| Exons    | 20842..20970, 20862..20978, 21061..21123, 21062..21127,<br>21062..21124, 21063..21128, 21064..21129 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o15.ts  | Method  | TBLASTX:Soybean     |
| Start    | 20857   | End     | 21224               |
| GI       | none  | Score   | 76                  |
| Exons    | 20857..20967, 21069..21167, 21070..21168, 21165..21224,<br>21166..21216 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No.    | 46681  | Strand  | -                   |
| Start       | 14607  | End     | 26487               |
| Name        | OJ990625_06.9927.C5.o4.np  | Method  | AAT/NAP             |
| Start       | 20961  | End     | 26487               |
| GI          | 4510377  | Score   | 1681                |
| Exons       | 20961..21010, 21081..21215, 21384..21443, 21530..21838,<br>21997..22145, 22237..22306, 22407..22610, 23213..23407,<br>23621..23892, 23985..24155, 24238..24368, 24458..24617,<br>24747..24935, 25058..25146, 25424..25661, 25765..25833,<br>25928..26105, 26333..26487 |         |                     |
| GI Descrip. | (AC007017) putative ATP-dependent RNA helicase A [Arabidopsis thaliana]  |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22414                     | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681                     | Strand  | -                   |
| Start    | 14607                     | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o6.tm | Method  | TBLASTX:Maize       |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 21129  | End   | 22488 |
| GI    | none   | Score | 125   |
| Exons | 21129..21224, 21130..21213, 21378..21452, 21384..21443,<br>21385..21444, 21386..21451, 21530..21742, 21531..21722,<br>21707..21838, 21711..21836, 21718..21837, 21722..21841,<br>21930..21977, 21994..22149, 21997..22146, 21998..22147,<br>22235..22306, 22236..22307, 22405..22488, 22405..22488 |       |       |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o11.tc  | Method  | TBLASTX:Cress       |
| Start    | 21548   | End     | 24300               |
| GI       | none  | Score   | 81                  |
| Exons    | 21548..21796, 23213..23410, 23220..23411, 23674..23826,<br>23675..23824, 24111..24155, 24238..24300 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414                                    | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681                                    | Strand  | -                   |
| Start    | 14607                                    | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o9.ts                | Method  | TBLASTX:Soybean     |
| Start    | 21587                                    | End     | 21872               |
| GI       | none                                     | Score   | 150                 |
| Exons    | 21587..21841, 21587..21838, 21660..21872 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o5.ts   | Method  | TBLASTX:Soybean     |
| Start    | 21985   | End     | 22476               |
| GI       | none  | Score   | 114                 |
| Exons    | 21985..22131, 22001..22147, 22001..22144, 22003..22149,<br>22188..22307, 22235..22306, 22405..22476, 22405..22476 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o3.tw   | Method  | TBLASTX:Wheat       |
| Start    | 21994   | End     | 22307               |
| GI       | none  | Score   | 79                  |
| Exons    | 21994..22044, 22051..22149, 22055..22147, 22235..22306,<br>22236..22307 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681   | Strand  | -                   |
| Start    | 14607   | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o3.tc   | Method  | TBLASTX:Cress       |
| Start    | 22030   | End     | 22611               |
| GI       | none  | Score   | 103                 |
| Exons    | 22030..22149, 22037..22147, 22235..22312, 22236..22307,<br>22405..22611, 22443..22610 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22414                      | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681                      | Strand  | -                   |
| Start    | 14607                      | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o12.ts | Method  | TBLASTX:Soybean     |
| Start    | 22477                      | End     | 22614               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| GI       | none   | Score   | 149                 |
| Exons    | 22477..22614, 22479..22613   |         |                     |
|          |  |         |                     |
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o16.tm   | Method  | TBLASTX:Maize       |
| Start    | 22488  | End     | 23266               |
| GI       | none   | Score   | 158                 |
| Exons    | 22488..22613, 22492..22614, 23213..23266   |         |                     |
|          |  |         |                     |
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o14.ts   | Method  | TBLASTX:Soybean     |
| Start    | 23276  | End     | 23411               |
| GI       | none   | Score   | 144                 |
| Exons    | 23276..23410, 23280..23411   |         |                     |
|          |  |         |                     |
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o7.ts  | Method  | TBLASTX:Soybean     |
| Start    | 23607  | End     | 23933               |
| GI       | none   | Score   | 67                  |
| Exons    | 23607..23690, 23620..23655, 23621..23689, 23653..23898, 23664..23933, 23675..23851   |         |                     |
|          |  |         |                     |
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o8.tm  | Method  | TBLASTX:Maize       |
| Start    | 23698  | End     | 24149               |
| GI       | none   | Score   | 154                 |
| Exons    | 23698..23898, 23705..23893, 24012..24149, 24023..24130   |         |                     |
|          |  |         |                     |
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o11.tm   | Method  | TBLASTX:Maize       |
| Start    | 24238  | End     | 24962               |
| GI       | none   | Score   | 87                  |
| Exons    | 24238..24306, 24239..24370, 24441..24617, 24459..24578, 24460..24618, 24721..24960, 24744..24962   |         |                     |
|          |  |         |                     |
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |
| Start    | 14607  | End     | 26487               |
| Name     | OJ990625_06.9927.C5.o2.tc  | Method  | TBLASTX:Cress       |
| Start    | 24302  | End     | 24945               |
| GI       | none   | Score   | 71                  |
| Exons    | 24302..24370, 24441..24617, 24454..24621, 24455..24520, 24460..24618, 24530..24634, 24557..24649, 24698..24922, 24730..24945, 24744..24935 |         |                     |
|          |  |         |                     |
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46681  | Strand  | -                   |

|       |  |        |                 |
|-------|--|--------|-----------------|
| Start | 14607  | End    | 26487           |
| Name  | OJ990625_06.9927.C5.o11.ts                             | Method | TBLASTX:Soybean |
| Start | 25747  | End    | 26086           |
| GI    | none   | Score  | 63              |
| Exons | 25747..25821, 25747..25839, 25940..26086, 26016..26078 |        |                 |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46682  | Strand  |                     |
| Start    | 29517  | End     | 32040               |
| Name     | OJ990625_06.9927.C5.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 29517  | End     | 32040               |
| GI       | none   | Score   | 127                 |
| Exons    | 29517..29621, 29527..29622, 29783..29842, 29785..29841,<br>30802..30873, 31319..31687, 31339..31626, 31356..31688,<br>31421..31690, 31909..32040, 31919..31984 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22414   | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46682   | Strand  |                     |
| Start    | 29517   | End     | 32040               |
| Name     | OJ990625_06.9927.C5.o7.tc   | Method  | TBLASTX:Cress       |
| Start    | 29523   | End     | 32001               |
| GI       | none  | Score   | 103                 |
| Exons    | 29523..29621, 29524..29625, 31382..31675, 31383..31697,<br>31915..32001 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46682  | Strand  |                     |
| Start    | 29517  | End     | 32040               |
| Name     | OJ990625_06.9927.C5.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 29779  | End     | 32013               |
| GI       | none   | Score   | 98                  |
| Exons    | 29779..29832, 29780..29839, 29780..29842, 30810..30890,<br>30819..30890, 30820..30894, 31009..31029, 31373..31687,<br>31374..31688, 31909..32013, 31916..32011 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22414                      | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46682                      | Strand  |                     |
| Start    | 29517                      | End     | 32040               |
| Name     | OJ990625_06.9927.C5.o4.tw  | Method  | TBLASTX:Wheat       |
| Start    | 31484                      | End     | 31706               |
| GI       | none                       | Score   | 188                 |
| Exons    | 31484..31705, 31491..31706 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46683  | Strand  |                     |
| Start    | 35108  | End     | 35396               |
| Name     | OJ990625_06.9927.C5.o16.ts                             | Method  | TBLASTX:Soybean     |
| Start    | 35108  | End     | 35353               |
| GI       | none   | Score   | 73                  |
| Exons    | 35108..35158, 35109..35159, 35210..35353, 35211..35351 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22414                      | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46683                      | Strand  |                     |
| Start    | 35108                      | End     | 35396               |
| Name     | OJ990625_06.9927.C5.o12.tm | Method  | TBLASTX:Maize       |
| Start    | 35125                      | End     | 35396               |
| GI       | none                       | Score   | 77                  |



Exons 35125..35154, 35126..35188, 35211..35396, 35213..35395

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22414  | Seq. ID | OJ990625_06.9927.C5 |
| Gene No. | 46683  | Strand  |                     |
| Start    | 35108  | End     | 35396               |
| Name     | OJ990625_06.9927.C5.o10.tc                             | Method  | TBLASTX:Cress       |
| Start    | 35135  | End     | 35396               |
| GI       | none   | Score   | 40                  |
| Exons    | 35135..35161, 35136..35159, 35211..35396, 35213..35395 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No.    | 46684  | Strand  | +                   |
| Start       | 3223   | End     | 7942                |
| Name        | OJ990625_06.9927.C6.o2.gp  | Method  | AAT/GAP             |
| Start       | 3223   | End     | 3861                |
| GI          | 43874_1.R1084  | Score   | 972                 |
| Exons       | 3223..3527, 3617..3861   |         |                     |
| GI Descrip. | '1203832 9.0e-42 (U46003) beta-D-glucan exohydrolase, isoenzyme ExoII [Hordeum vulgare] >gi_1588407_prf_2208395A beta-D-glucan exohydrolase [Hordeum vulgare]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46684  | Strand  | +                   |
| Start    | 3223   | End     | 7942                |
| Name     | OJ990625_06.9927.C6.o1.gs  | Method  | GENSCAN             |
| Start    | 3286   | End     | 7942                |
| GI       | none   | Score   | .63                 |
| Exons    | 3286..3465, 3491..3527, 3617..3912, 4007..4399, 4465..4957, 4968..5487, 5803..5863, 7594..7803, 7922..7942 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No.    | 46684  | Strand  | +                   |
| Start       | 3223   | End     | 7942                |
| Name        | OJ990625_06.9927.C6.o1.np  | Method  | AAT/NAP             |
| Start       | 3304   | End     | 5515                |
| GI          | 1203832  | Score   | 2078                |
| Exons       | 3304..3515, 3610..3912, 4007..4399, 4465..4957, 5031..5515   |         |                     |
| GI Descrip. | (U46003) beta-D-glucan exohydrolase, isoenzyme ExoII [Hordeum vulgare] gi 1588407 prf  2208395A beta-D-glucan exohydrolase [Hordeum vulgare] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22415                     | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46685                     | Strand  | +                   |
| Start    | 11149                     | End     | 11298               |
| Name     | OJ990625_06.9927.C6.o2.gs | Method  | GENSCAN             |
| Start    | 11149                     | End     | 11298               |
| GI       | none                      | Score   | .43                 |
| Exons    | 11149..11298              |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22415   | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46686   | Strand  | +                   |
| Start    | 20632   | End     | 24378               |
| Name     | OJ990625_06.9927.C6.o4.gp   | Method  | AAT/GAP             |
| Start    | 20632   | End     | 24135               |
| GI       | 16311_1.R1084   | Score   | 3632                |
| Exons    | 20632..20853, 21258..21525, 21623..21827, 22038..22128, 22246..22388, 22528..22771, 22878..22982, 23327..23509, |         |                     |

23597..23801, 23894..24135  
 GI Descrip. '1203832 0.0e+00 (U46003) beta-D-glucan exohydrolase, isoenzyme  
 ExoII [Hordeum vulgare] >gi\_1588407\_prf\_\_2208395A beta-D-glucan  
 exohydrolase [Hordeum vulgare]'

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46686  | Strand  | +                   |
| Start    | 20632  | End     | 24378               |
| Name     | OJ990625_06.9927.C6.o2.np  | Method  | AAT/NAP             |
| Start    | 21309  | End     | 24372               |
| GI       | 1203832  | Score   | 2631                |
| Exons    | 21309..21525, 21623..21827, 22038..22128, 22246..22388,<br>22528..22771, 22878..22982, 23327..23509, 23597..23801,<br>23894..24372 |         |                     |

GI Descrip. (U46003) beta-D-glucan exohydrolase, isoenzyme ExoII [Hordeum  
 vulgare] gi|1588407|prf||2208395A beta-D-glucan exohydrolase  
 [Hordeum vulgare]

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46686  | Strand  | +                   |
| Start    | 20632  | End     | 24378               |
| Name     | OJ990625_06.9927.C6.o4.gs  | Method  | GENSCAN             |
| Start    | 21309  | End     | 24378               |
| GI       | none   | Score   | .94                 |
| Exons    | 21309..21525, 21623..21827, 22038..22128, 22246..22388,<br>22528..22771, 22878..22982, 23327..23509, 23597..23801,<br>23894..24378 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22415   | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46687   | Strand  | +                   |
| Start    | 27252   | End     | 34010               |
| Name     | OJ990625_06.9927.C6.o5.gs   | Method  | GENSCAN             |
| Start    | 27252   | End     | 34010               |
| GI       | none  | Score   | .59                 |
| Exons    | 27252..27342, 27575..27783, 27840..30218, 30282..31795,<br>31841..34010 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22415   | Seq. ID | OJ990625_06.9927.C6 |
| Gene No.    | 46687   | Strand  | +                   |
| Start       | 27252   | End     | 34010               |
| Name        | OJ990625_06.9927.C6.o3.np   | Method  | AAT/NAP             |
| Start       | 28363   | End     | 34007               |
| GI          | 6498441   | Score   | 6831                |
| Exons       | 28363..29424, 29755..30218, 30282..30655, 30839..30973,<br>31148..31488, 31681..32063, 32235..33632, 33726..34007   |         |                     |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the<br>predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type<br>retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No.    | 46688  | Strand  | +                   |
| Start       | 34170  | End     | 34630               |
| Name        | OJ990625_06.9927.C6.o6.gp                                    | Method  | AAT/GAP             |
| Start       | 34170  | End     | 34630               |
| GI          | 2428323  | Score   | 849                 |
| Exons       | 34170..34630   |         |                     |
| GI Descrip. | 5803242/dbj AP000399.1 AP000399 0.0e+00 Oryza sativa genomic |         |                     |

DNA, chromosome 6, clone:P0535G04

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No.    | 46689  | Strand  | -                   |
| Start       | 1822   | End     | 1907                |
| Name        | OJ990625_06.9927.C6.o1.gp  | Method  | AAT/GAP             |
| Start       | 1822   | End     | 1907                |
| GI          | LIB3477-003-P1-K1-E9   | Score   | 115                 |
| Exons       | 1822..1907   |         |                     |
| GI Descrip. | '2498586/sp Q40638 MPO1_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY S 1 PRECURSOR (ORY S I) >gi_1173557 (U31771) Ory s 1 [Oryza sativa]' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No.    | 46690  | Strand  | -                   |
| Start       | 5021   | End     | 5672                |
| Name        | OJ990625_06.9927.C6.o3.gp  | Method  | AAT/GAP             |
| Start       | 5021   | End     | 5672                |
| GI          | 45587_1.R1084  | Score   | 1107                |
| Exons       | 5021..5672   |         |                     |
| GI Descrip. | '1203832 3.0e-30 (U46003) beta-D-glucan exohydrolase, isoenzyme ExoII [Hordeum vulgare] >gi_1588407_prf_2208395A beta-D-glucan exohydrolase [Hordeum vulgare]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46691  | Strand  | -                   |
| Start    | 12585  | End     | 19564               |
| Name     | OJ990625_06.9927.C6.o3.gs  | Method  | GENSCAN             |
| Start    | 12585  | End     | 19564               |
| GI       | none   | Score   | .51                 |
| Exons    | 12585..12762, 12829..12970, 14580..14634, 14878..15165, 15341..15543, 15991..16040, 18747..18869, 19036..19181, 19475..19564 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No.    | 46692  | Strand  | -                   |
| Start       | 24140  | End     | 24630               |
| Name        | OJ990625_06.9927.C6.o5.gp  | Method  | AAT/GAP             |
| Start       | 24140  | End     | 24630               |
| GI          | 15671_1.R1084  | Score   | 934                 |
| Exons       | 24140..24630   |         |                     |
| GI Descrip. | '1203832 5.0e-35 (U46003) beta-D-glucan exohydrolase, isoenzyme ExoII [Hordeum vulgare] >gi_1588407_prf_2208395A beta-D-glucan exohydrolase [Hordeum vulgare]' |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22415   | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46693   | Strand  | -                   |
| Start    | 34638   | End     | 36863               |
| Name     | OJ990625_06.9927.C6.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 3366  | End     | 24363               |
| GI       | none  | Score   | 115                 |
| Exons    | 3366..3455, 3370..3456, 3606..3914, 3646..3930, 3983..4057, 3998..4084, 4006..4089, 4082..4120, 4096..4119, 4118..4270, 4132..4398, 4133..4399, 4462..4944, 4464..4700, 4558..4863, 4755..4946, 5018..5122, 5026..5100, 5126..5236, 5195..5530, 5286..5504, 5297..5506, 21302..21526, 21303..21527, 21307..21528, 21475..21528, 21621..21827, 21622..21828, |         |                     |

21687..21827, 21689..21829, 21700..21831, 22024..22131,  
 22035..22136, 22244..22387, 22245..22388, 22246..22386,  
 22376..22396, 22525..22770, 22526..22771, 22527..22778,  
 22875..22985, 22876..22980, 22878..22982, 23325..23510,  
 23327..23521, 23327..23521, 23594..23788, 23596..23793,  
 23597..23788, 23602..23793, 23889..23963, 23889..23978,  
 23890..23979, 23893..24009, 23938..24363, 23970..24359

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
 Gene No. 46693 Strand -  
 Start 34638 End 36863  
 Name OJ990625\_06.9927.C6.o2.ts Method TBLASTX:Soybean  
 Start 3370 End 22359  
 GI none Score 50  
 Exons 3370..3399, 3385..3456, 3606..3686, 3709..3930, 3717..3914,  
 3997..4032, 3998..4081, 4084..4179, 4088..4180, 21333..21404,  
 21390..21527, 21398..21526, 21622..21723, 21715..21828,  
 21723..21836, 22035..22130, 22035..22136, 22036..22131,  
 22185..22346, 22245..22346, 22246..22359

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
 Gene No. 46693 Strand -  
 Start 34638 End 36863  
 Name OJ990625\_06.9927.C6.o1.tc Method TBLASTX:Cress  
 Start 3382 End 22648  
 GI none Score 74  
 Exons 3382..3456, 3450..3503, 3597..3914, 3646..3930, 3998..4084,  
 4000..4035, 4082..4276, 4090..4275, 21387..21527, 21404..21526,  
 21622..21828, 21723..21827, 22018..22134, 22035..22136,  
 22245..22352, 22246..22353, 22525..22647, 22535..22648

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
 Gene No. 46693 Strand -  
 Start 34638 End 36863  
 Name OJ990625\_06.9927.C6.o10.tw Method TBLASTX:Wheat  
 Start 3799 End 22305  
 GI none Score 126  
 Exons 3799..3909, 4004..4081, 4004..4081, 22035..22112, 22035..22118,  
 22036..22125, 22243..22305, 22245..22295

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
 Gene No. 46693 Strand -  
 Start 34638 End 36863  
 Name OJ990625\_06.9927.C6.o7.tw Method TBLASTX:Wheat  
 Start 4088 End 22791  
 GI none Score 63  
 Exons 4088..4153, 4096..4152, 4162..4416, 4163..4402, 22306..22359,  
 22366..22389, 22514..22774, 22525..22791

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
 Gene No. 46693 Strand -  
 Start 34638 End 36863  
 Name OJ990625\_06.9927.C6.o2.tc Method TBLASTX:Cress  
 Start 4280 End 23470  
 GI none Score 147  
 Exons 4280..4399, 4282..4398, 4455..4703, 4462..4716, 22649..22771,  
 22651..22770, 22875..22985, 22876..22980, 22877..22987,

23327..23470

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
Gene No. 46693 Strand -  
Start 34638 End 36863  
Name OJ990625\_06.9927.C6.o1.ts Method TBLASTX:Soybean  
Start 4340 End 24377  
GI none Score 81  
Exons 4340..4399, 4340..4399, 4455..4961, 4462..4959, 5020..5100,  
5027..5152, 5132..5233, 5179..5223, 5195..5299, 5297..5356,  
5299..5355, 5339..5485, 5350..5502, 5351..5503, 22712..22771,  
22715..22771, 22875..22985, 22877..22987, 23325..23420,  
23327..23521, 23327..23521, 23410..23529, 23596..23805,  
23597..23803, 23613..23813, 23618..23842, 23890..24213,  
23892..24212, 24207..24377, 24208..24360

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
Gene No. 46693 Strand -  
Start 34638 End 36863  
Name OJ990625\_06.9927.C6.o2.tw Method TBLASTX:Wheat  
Start 4501 End 23791  
GI none Score 518  
Exons 4501..4947, 4554..4703, 4561..4863, 4755..4943, 22914..22985,  
22921..22980, 23304..23507, 23327..23509, 23327..23509,  
23410..23520, 23596..23787, 23597..23791

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
Gene No. 46693 Strand -  
Start 34638 End 36863  
Name OJ990625\_06.9927.C6.o3.tc Method TBLASTX:Cress  
Start 4767 End 24090  
GI none Score 66  
Exons 4767..4811, 4768..4812, 4786..4959, 4827..4961, 5029..5100,  
5030..5137, 5126..5233, 5179..5220, 23579..23665, 23611..23658,  
23639..23803, 23671..23805, 23892..24077, 23893..24090

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
Gene No. 46693 Strand -  
Start 34638 End 36863  
Name OJ990625\_06.9927.C6.o4.tc Method TBLASTX:Cress  
Start 5314 End 24423  
GI none Score 301  
Exons 5314..5502, 5321..5509, 24142..24423, 24148..24309, 24171..24374

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
Gene No. 46693 Strand -  
Start 34638 End 36863  
Name OJ990625\_06.9927.C6.o8.tw Method TBLASTX:Wheat  
Start 28512 End 28904  
GI none Score 58  
Exons 28512..28559, 28566..28664, 28571..28672, 28631..28870,  
28647..28904

Seq. No. 22415 Seq. ID OJ990625\_06.9927.C6  
Gene No. 46693 Strand -  
Start 34638 End 36863  
Name OJ990625\_06.9927.C6.o5.tm Method TBLASTX:Maize

Start 28517  
 GI none  
 Exons 28517..28801, 28554..28802

End 28802  
 Score 195

Seq. No. 22415  
 Gene No. 46693  
 Start 34638  
 Name OJ990625\_06.9927.C6.o4.tw  
 Start 29639  
 GI none  
 Exons 29639..29812, 29640..30125, 29834..30094, 29904..30098

Seq. ID OJ990625\_06.9927.C6  
 Strand -  
 End 36863  
 Method TBLASTX:Wheat  
 End 30125  
 Score 408

Seq. No. 22415  
 Gene No. 46693  
 Start 34638  
 Name OJ990625\_06.9927.C6.o1.tw  
 Start 30290  
 GI none  
 Exons 30290..30745, 30291..30752, 30291..30746

Seq. ID OJ990625\_06.9927.C6  
 Strand -  
 End 36863  
 Method TBLASTX:Wheat  
 End 30752  
 Score 579

Seq. No. 22415  
 Gene No. 46693  
 Start 34638  
 Name OJ990625\_06.9927.C6.o4.ts  
 Start 30330  
 GI none  
 Exons 30330..30554, 30561..30695

Seq. ID OJ990625\_06.9927.C6  
 Strand -  
 End 36863  
 Method TBLASTX:Soybean  
 End 30695  
 Score 117

Seq. No. 22415  
 Gene No. 46693  
 Start 34638  
 Name OJ990625\_06.9927.C6.o2.tm  
 Start 30420  
 GI none  
 Exons 30420..30776, 30455..30766, 30459..30776

Seq. ID OJ990625\_06.9927.C6  
 Strand -  
 End 36863  
 Method TBLASTX:Maize  
 End 30776  
 Score 392

Seq. No. 22415  
 Gene No. 46693  
 Start 34638  
 Name OJ990625\_06.9927.C6.o4.tm  
 Start 30803  
 GI none  
 Exons 30803..31168, 30804..31187

Seq. ID OJ990625\_06.9927.C6  
 Strand -  
 End 36863  
 Method TBLASTX:Maize  
 End 31187  
 Score 356

Seq. No. 22415  
 Gene No. 46693  
 Start 34638  
 Name OJ990625\_06.9927.C6.o3.tw  
 Start 30860  
 GI none  
 Exons 30860..31273, 30861..31280

Seq. ID OJ990625\_06.9927.C6  
 Strand -  
 End 36863  
 Method TBLASTX:Wheat  
 End 31280  
 Score 483

Seq. No. 22415  
 Gene No. 46693  
 Start 34638  
 Name OJ990625\_06.9927.C6.o3.ts  
 Start 30939

Seq. ID OJ990625\_06.9927.C6  
 Strand -  
 End 36863  
 Method TBLASTX:Soybean  
 End 31310

|          |  |         |                     |
|----------|--|---------|---------------------|
| GI       | none   | Score   | 277                 |
| Exons    | 30939..31310, 30956..31099   |         |                     |
|          |  |         |                     |
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46693  | Strand  | -                   |
| Start    | 34638  | End     | 36863               |
| Name     | OJ990625_06.9927.C6.o6.tw  | Method  | TBLASTX:Wheat       |
| Start    | 31935  | End     | 32369               |
| GI       | none   | Score   | 236                 |
| Exons    | 31935..32186, 31935..32132, 32000..32176, 32220..32369, 32229..32366, 32231..32368 |         |                     |
|          |  |         |                     |
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46693  | Strand  | -                   |
| Start    | 34638  | End     | 36863               |
| Name     | OJ990625_06.9927.C6.o11.tw   | Method  | TBLASTX:Wheat       |
| Start    | 32424  | End     | 32684               |
| GI       | none   | Score   | 186                 |
| Exons    | 32424..32684   |         |                     |
|          |  |         |                     |
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46693  | Strand  | -                   |
| Start    | 34638  | End     | 36863               |
| Name     | OJ990625_06.9927.C6.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 32877  | End     | 33200               |
| GI       | none   | Score   | 364                 |
| Exons    | 32877..33200, 32906..33187   |         |                     |
|          |  |         |                     |
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46693  | Strand  | -                   |
| Start    | 34638  | End     | 36863               |
| Name     | OJ990625_06.9927.C6.o5.tw  | Method  | TBLASTX:Wheat       |
| Start    | 33014  | End     | 33395               |
| GI       | none   | Score   | 375                 |
| Exons    | 33014..33070, 33015..33395, 33111..33356, 33116..33364                             |         |                     |
|          |  |         |                     |
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46693  | Strand  | -                   |
| Start    | 34638  | End     | 36863               |
| Name     | OJ990625_06.9927.C6.o9.tw  | Method  | TBLASTX:Wheat       |
| Start    | 33396  | End     | 33998               |
| GI       | none   | Score   | 261                 |
| Exons    | 33396..33692, 33400..33471, 33401..33499, 33536..33679, 33872..33994, 33873..33998 |         |                     |
|          |  |         |                     |
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46693  | Strand  | -                   |
| Start    | 34638  | End     | 36863               |
| Name     | OJ990625_06.9927.C6.o6.gs  | Method  | GENSCAN             |
| Start    | 34638  | End     | 36770               |
| GI       | none   | Score   | .69                 |
| Exons    | 34638..35593, 35599..36004, 36076..36538, 36630..36770                             |         |                     |
|          |  |         |                     |
| Seq. No. | 22415  | Seq. ID | OJ990625_06.9927.C6 |
| Gene No. | 46693  | Strand  | -                   |
| Start    | 34638  | End     | 36863               |
| Name     | OJ990625_06.9927.C6.o4.np  | Method  | AAT/NAP             |

|             |  |       |       |
|-------------|--|-------|-------|
| Start       | 34641  | End   | 36863 |
| GI          | 5803259  | Score | 3288  |
| Exons       | 34641..36538, 36630..36863                     |       |       |
| GI Descrip. | (AP000399) hypothetical protein [Oryza sativa] |       |       |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22416  | Seq. ID | OJ990625_06.9927.C7 |
| Gene No.    | 46694  | Strand  | -                   |
| Start       | 1  | End     | 928                 |
| Name        | OJ990625_06.9927.C7.o1.np                      | Method  | AAT/NAP             |
| Start       | 1  | End     | 928                 |
| GI          | 5803259  | Score   | 1573                |
| Exons       | 1..928   |         |                     |
| GI Descrip. | (AP000399) hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22416                     | Seq. ID | OJ990625_06.9927.C7 |
| Gene No. | 46694                     | Strand  | -                   |
| Start    | 1                         | End     | 928                 |
| Name     | OJ990625_06.9927.C7.o1.gs | Method  | GENSCAN             |
| Start    | 26                        | End     | 928                 |
| GI       | none                      | Score   | .77                 |
| Exons    | 26..928                   |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22416                     | Seq. ID | OJ990625_06.9927.C7 |
| Gene No. | 46695                     | Strand  | -                   |
| Start    | 1309                      | End     | 1424                |
| Name     | OJ990625_06.9927.C7.o2.gs | Method  | GENSCAN             |
| Start    | 1309                      | End     | 1424                |
| GI       | none                      | Score   | .7                  |
| Exons    | 1309..1424                |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22417  | Seq. ID | OJ990625_06.9927.C8 |
| Gene No.    | 46696  | Strand  | +                   |
| Start       | 1  | End     | 7330                |
| Name        | OJ990625_06.9927.C8.o3.np                      | Method  | AAT/NAP             |
| Start       | 1  | End     | 7330                |
| GI          | 5042454  | Score   | 162                 |
| Exons       | 1..31, 3552..3716, 6753..6917, 7270..7330      |         |                     |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22417                     | Seq. ID | OJ990625_06.9927.C8 |
| Gene No. | 46696                     | Strand  | +                   |
| Start    | 1                         | End     | 7330                |
| Name     | OJ990625_06.9927.C8.o1.gs | Method  | GENSCAN             |
| Start    | 70                        | End     | 976                 |
| GI       | none                      | Score   | .56                 |
| Exons    | 70..242, 749..976         |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22417                     | Seq. ID | OJ990625_06.9927.C8 |
| Gene No. | 46696                     | Strand  | +                   |
| Start    | 1                         | End     | 7330                |
| Name     | OJ990625_06.9927.C8.o2.gs | Method  | GENSCAN             |
| Start    | 4107                      | End     | 4343                |
| GI       | none                      | Score   | .45                 |
| Exons    | 4107..4343                |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22417 | Seq. ID | OJ990625_06.9927.C8 |
| Gene No. | 46697 | Strand  | -                   |



|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 1  | End    | 275     |
| Name        | OJ990625_06.9927.C8.o1.np  | Method | AAT/NAP |
| Start       | 1  | End    | 275     |
| GI          | 5922623  | Score  | 87      |
| Exons       | 1..71, 188..275  |        |         |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6016856 dbj BAA85199.1  (AP000570) hypothetical protein<br>[Oryza sativa] |        |         |

|             |                                   |         |                     |
|-------------|-----------------------------------|---------|---------------------|
| Seq. No.    | 22417                             | Seq. ID | OJ990625_06.9927.C8 |
| Gene No.    | 46698                             | Strand  | -                   |
| Start       | 3180                              | End     | 3297                |
| Name        | OJ990625_06.9927.C8.o2.np         | Method  | AAT/NAP             |
| Start       | 3180                              | End     | 3297                |
| GI          | 5852093                           | Score   | 61                  |
| Exons       | 3180..3297                        |         |                     |
| GI Descrip. | (AL117264) zwh16.1 [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22417                     | Seq. ID | OJ990625_06.9927.C8 |
| Gene No. | 46699                     | Strand  | -                   |
| Start    | 4506                      | End     | 5076                |
| Name     | OJ990625_06.9927.C8.o1.gp | Method  | AAT/GAP             |
| Start    | 4506                      | End     | 5076                |
| GI       | none                      | Score   | 1092                |
| Exons    | 4506..5076                |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22417   | Seq. ID | OJ990625_06.9927.C8 |
| Gene No. | 46700   | Strand  | -                   |
| Start    | 6871  | End     | 10316               |
| Name     | OJ990625_06.9927.C8.o3.gs   | Method  | GENSCAN             |
| Start    | 6871  | End     | 10316               |
| GI       | none  | Score   | .55                 |
| Exons    | 6871..7012, 7188..7398, 7400..7504, 8788..8934, 9690..9826,<br>10273..10316 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22417  | Seq. ID | OJ990625_06.9927.C8 |
| Gene No.    | 46700  | Strand  | -                   |
| Start       | 6871   | End     | 10316               |
| Name        | OJ990625_06.9927.C8.o2.gp  | Method  | AAT/GAP             |
| Start       | 9702   | End     | 10267               |
| GI          | 8022_1.R1084   | Score   | 323                 |
| Exons       | 9702..9724, 10013..10267   |         |                     |
| GI Descrip. | '5091496/dbj AB023482.2 AB023482 3.0e-37 Oryza sativa genomic<br>DNA, chromosome 6, clone P0680A03, complete sequence' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22418                     | Seq. ID | OJ990625_06.9927.C9 |
| Gene No. | 46701                     | Strand  | +                   |
| Start    | 525                       | End     | 775                 |
| Name     | OJ990625_06.9927.C9.o1.gs | Method  | GENSCAN             |
| Start    | 525                       | End     | 775                 |
| GI       | none                      | Score   | .46                 |
| Exons    | 525..570, 666..775        |         |                     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22419                      | Seq. ID | OJ990625_06.9927.C10 |
| Gene No. | 46702                      | Strand  | +                    |
| Start    | 38                         | End     | 122                  |
| Name     | OJ990625_06.9927.C10.o1.gs | Method  | GENSCAN              |

Start 38  
GI none  
Exons 38..122

End 122  
Score .97

Seq. No. 22420  
Gene No. 46703  
Start 43  
Name OJ990625\_06.9927.C12.o1.gs  
Start 43  
GI none  
Exons 43..570

Seq. ID OJ990625\_06.9927.C12  
Strand -  
End 570  
Method GENSCAN  
End 570  
Score .48

Seq. No. 22420  
Gene No. 46703  
Start 43  
Name OJ990625\_06.9927.C12.o1.tm  
Start 331  
GI none  
Exons 331..426, 371..421, 469..570, 470..568

Seq. ID OJ990625\_06.9927.C12  
Strand -  
End 570  
Method TBLASTX:Maize  
End 570  
Score 70

Seq. No. 22421  
Gene No. 46704  
Start 102  
Name OJ990625\_06.9927.C13.o1.gs  
Start 102  
GI none  
Exons 102..202

Seq. ID OJ990625\_06.9927.C13  
Strand +  
End 202  
Method GENSCAN  
End 202  
Score 1

Seq. No. 22422  
Gene No. 46705  
Start 199  
Name OJ990625\_06.9927.C14.o1.gs  
Start 199  
GI none  
Exons 199..281

Seq. ID OJ990625\_06.9927.C14  
Strand +  
End 281  
Method GENSCAN  
End 281  
Score .99

Seq. No. 22423  
Gene No. 46706  
Start 581  
Name OJ990625\_06.9927.C15.o1.gp  
Start 581  
GI 54499\_1.R1084  
Exons 581..667

Seq. ID OJ990625\_06.9927.C15  
Strand -  
End 667  
Method AAT/GAP  
End 667  
Score 104

GI Descrip. '2245131/emb|CAB10552.1| 1.0e-09 (Z97344) hypothetical protein [Arabidopsis thaliana]'

Seq. No. 22423  
Gene No. 46707  
Start 591  
Name OJ990625\_06.9927.C15.o1.gs  
Start 591  
GI none  
Exons 591..665

Seq. ID OJ990625\_06.9927.C15  
Strand -  
End 665  
Method GENSCAN  
End 665  
Score .67

Seq. No. 22424  
Gene No. 46708  
Start 355

Seq. ID OJ990625\_06.9927.C18  
Strand +  
End 457

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990625_06.9927.C18.o1.gs   | Method  | GENSCAN              |
| Start       | 355  | End     | 457                  |
| GI          | none   | Score   | .64                  |
| Exons       | 355...457  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No.    | 46709  | Strand  | +                    |
| Start       | 825  | End     | 1560                 |
| Name        | OJ990625_06.9927.C19.o1.gs   | Method  | GENSCAN              |
| Start       | 825  | End     | 1560                 |
| GI          | none   | Score   | .66                  |
| Exons       | 825..1223, 1315..1560  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No.    | 46710  | Strand  | +                    |
| Start       | 3018   | End     | 3927                 |
| Name        | OJ990625_06.9927.C19.o1.np   | Method  | AAT/NAP              |
| Start       | 3018   | End     | 3915                 |
| GI          | 82045  | Score   | 527                  |
| Exons       | 3018..3654, 3754..3915   |         |                      |
| GI Descrip. | embryonic protein ecp31 - carrot gi 18337 emb CAA43046  (X60593)<br>embryonic cell protein [Daucus carota]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No.    | 46710  | Strand  | +                    |
| Start       | 3018   | End     | 3927                 |
| Name        | OJ990625_06.9927.C19.o3.gs   | Method  | GENSCAN              |
| Start       | 3018   | End     | 3927                 |
| GI          | none   | Score   | .99                  |
| Exons       | 3018..3479, 3754..3927   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No.    | 46711  | Strand  | -                    |
| Start       | 1753   | End     | 1917                 |
| Name        | OJ990625_06.9927.C19.o2.gs   | Method  | GENSCAN              |
| Start       | 1753   | End     | 1917                 |
| GI          | none   | Score   | .57                  |
| Exons       | 1753..1917   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No.    | 46712  | Strand  | -                    |
| Start       | 3691   | End     | 8319                 |
| Name        | OJ990625_06.9927.C19.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 996  | End     | 3906                 |
| GI          | none   | Score   | 83                   |
| Exons       | 996..1106, 3018..3044, 3045..3296, 3068..3250, 3294..3362,<br>3482..3565, 3754..3903, 3781..3906, 3810..3899 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No.    | 46712  | Strand  | -                    |
| Start       | 3691   | End     | 8319                 |
| Name        | OJ990625_06.9927.C19.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 999  | End     | 3903                 |
| GI          | none   | Score   | 81                   |
| Exons       | 999..1106, 3068..3193, 3069..3299, 3294..3410, 3317..3361,<br>3482..3565, 3571..3651, 3751..3903, 3819..3899 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No.    | 46712  | Strand  | -                    |
| Start       | 3691   | End     | 8319                 |
| Name        | OJ990625_06.9927.C19.o2.np   | Method  | AAT/NAP              |
| Start       | 3691   | End     | 8197                 |
| GI          | 2245101  | Score   | 361                  |
| Exons       | 3691..3733, 5355..5514, 5886..5988, 6133..6219, 6991..7169, 7757..7796, 7898..7957, 8150..8197 |         |                      |
| GI Descrip. | (Z97343) hypothetical protein [Arabidopsis thaliana]   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22425                      | Seq. ID | OJ990625_06.9927.C19 |
| Gene No. | 46712                      | Strand  | -                    |
| Start    | 3691                       | End     | 8319                 |
| Name     | OJ990625_06.9927.C19.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 3757                       | End     | 3914                 |
| GI       | none                       | Score   | 221                  |
| Exons    | 3757..3912, 3810..3914     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No.    | 46712  | Strand  | -                    |
| Start       | 3691   | End     | 8319                 |
| Name        | OJ990625_06.9927.C19.o1.gp   | Method  | AAT/GAP              |
| Start       | 4585   | End     | 8319                 |
| GI          | 1086_1.R1084   | Score   | 2461                 |
| Exons       | 4585..5092, 5182..5273, 5367..5491, 5952..6012, 6133..6219, 6295..6333, 6991..7169, 7757..7796, 7898..7957, 8150..8319 |         |                      |
| GI Descrip. | '2245101/emb CAB10523.1  2.0e-40 (Z97343) hypothetical protein [Arabidopsis thaliana]'                                 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No. | 46712  | Strand  | -                    |
| Start    | 3691   | End     | 8319                 |
| Name     | OJ990625_06.9927.C19.o2.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 4975   | End     | 5492                 |
| GI       | none   | Score   | 93                   |
| Exons    | 4975..5094, 4982..5098, 5152..5274, 5181..5273, 5400..5492 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No. | 46712  | Strand  | -                    |
| Start    | 3691   | End     | 8319                 |
| Name     | OJ990625_06.9927.C19.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4975   | End     | 6204                 |
| GI       | none   | Score   | 100                  |
| Exons    | 4975..5094, 4979..5098, 5152..5274, 5181..5273, 5953..6006, 6133..6204 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No. | 46712  | Strand  | -                    |
| Start    | 3691   | End     | 8319                 |
| Name     | OJ990625_06.9927.C19.o4.gs   | Method  | GENSCAN              |
| Start    | 4975   | End     | 8197                 |
| GI       | none   | Score   | .75                  |
| Exons    | 4975..5095, 5182..5273, 5367..5491, 5952..6012, 6133..6219, 6295..6333, 7104..7169, 7898..7957, 8150..8197 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22425 | Seq. ID | OJ990625_06.9927.C19 |
| Gene No. | 46712 | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 3691   | End    | 8319          |
| Name  | OJ990625_06.9927.C19.o1.tm   | Method | TBLASTX:Maize |
| Start | 5193   | End    | 8273          |
| GI    | none   | Score  | 118           |
| Exons | 5193..5273, 5194..5274, 5379..5516, 5388..5492, 5948..6010, 5952..6014, 5953..6015, 5954..6010, 6129..6221, 6130..6222, 6134..6220, 6134..6226, 6276..6329, 6290..6328, 6294..6341, 6295..6342, 6982..7170, 6991..7170, 6992..7171, 7755..7802, 7755..7796, 7895..7963, 7896..7961, 7896..7964, 8150..8200, 8151..8201, 8208..8273 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No. | 46712  | Strand  | -                    |
| Start    | 3691   | End     | 8319                 |
| Name     | OJ990625_06.9927.C19.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 6951   | End     | 8216                 |
| GI       | none   | Score   | 138                  |
| Exons    | 6951..7169, 6958..7170, 6992..7171, 7755..7796, 7895..7963, 8150..8203, 8154..8216 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No. | 46712  | Strand  | -                    |
| Start    | 3691   | End     | 8319                 |
| Name     | OJ990625_06.9927.C19.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 6982   | End     | 8258                 |
| GI       | none   | Score   | 272                  |
| Exons    | 6982..7170, 6992..7171, 7753..7797, 7755..7802, 7755..7796, 7895..7963, 7896..7961, 7897..7962, 8150..8257, 8151..8258 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22425  | Seq. ID | OJ990625_06.9927.C19 |
| Gene No. | 46712  | Strand  | -                    |
| Start    | 3691   | End     | 8319                 |
| Name     | OJ990625_06.9927.C19.o3.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 6997   | End     | 8200                 |
| GI       | none   | Score   | 163                  |
| Exons    | 6997..7170, 6998..7171, 7755..7796, 7895..7963, 8150..8200 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22426  | Seq. ID | OJ990625_06.9927.C21 |
| Gene No.    | 46713  | Strand  | +                    |
| Start       | 1  | End     | 473                  |
| Name        | OJ990625_06.9927.C21.o1.gp   | Method  | AAT/GAP              |
| Start       | 1  | End     | 247                  |
| GI          | uC-osflm202047f08b1  | Score   | 256                  |
| Exons       | 1..23, 129..247  |         |                      |
| GI Descrip. | '5777952 gb AAD51446.1 AF128406_1 9.0e-20 (AF128406) prenyl-dependent prelamins A binding protein Narf [Homo sapiens]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22426   | Seq. ID | OJ990625_06.9927.C21 |
| Gene No.    | 46713   | Strand  | +                    |
| Start       | 1   | End     | 473                  |
| Name        | OJ990625_06.9927.C21.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 473                  |
| GI          | 6912524   | Score   | 136                  |
| Exons       | 1..29, 135..255, 353..473   |         |                      |
| GI Descrip. | nuclear prelamins A recognition factor gi 5777952 gb AAD51446.1 AF128406_1 (AF128406) nuclear prelamins A recognition factor [Homo sapiens] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22426   | Seq. ID | OJ990625_06.9927.C21 |
| Gene No. | 46713   | Strand  | +                    |
| Start    | 1   | End     | 473                  |
| Name     | OJ990625_06.9927.C21.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 1   | End     | 463                  |
| GI       | none  | Score   | 44                   |
| Exons    | 1..24, 105..260, 117..257, 161..262, 325..447, 330..443, 347..463 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22426                      | Seq. ID | OJ990625_06.9927.C21 |
| Gene No. | 46713                      | Strand  | +                    |
| Start    | 1                          | End     | 473                  |
| Name     | OJ990625_06.9927.C21.o1.gs | Method  | GENSCAN              |
| Start    | 129                        | End     | 444                  |
| GI       | none                       | Score   | .76                  |
| Exons    | 129..255, 353..444         |         |                      |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22427  | Seq. ID | OJ990615_06.9926.C1 |
| Gene No.    | 46714  | Strand  | -                   |
| Start       | 1  | End     | 1926                |
| Name        | OJ990615_06.9926.C1.o1.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 1926                |
| GI          | 3021270  | Score   | 137                 |
| Exons       | 1..223, 1533..1641, 1901..1926   |         |                     |
| GI Descrip. | (AL022347) serine/threonine kinase-like protein [Arabidopsis thaliana] |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22427                              | Seq. ID | OJ990615_06.9926.C1 |
| Gene No. | 46714                              | Strand  | -                   |
| Start    | 1                                  | End     | 1926                |
| Name     | OJ990615_06.9926.C1.o1.gs          | Method  | GENSCAN             |
| Start    | 1134                               | End     | 1803                |
| GI       | none                               | Score   | .41                 |
| Exons    | 1134..1226, 1533..1645, 1785..1803 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22428   | Seq. ID | OJ990615_06.9926.C3 |
| Gene No.    | 46715   | Strand  | +                   |
| Start       | 1   | End     | 956                 |
| Name        | OJ990615_06.9926.C3.o1.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 956                 |
| GI          | 6498441   | Score   | 991                 |
| Exons       | 1..956  |         |                     |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                     |

|          |                                     |         |                     |
|----------|-------------------------------------|---------|---------------------|
| Seq. No. | 22428                               | Seq. ID | OJ990615_06.9926.C3 |
| Gene No. | 46715                               | Strand  | +                   |
| Start    | 1                                   | End     | 956                 |
| Name     | OJ990615_06.9926.C3.o2.tw           | Method  | TBLASTX:Wheat       |
| Start    | 40                                  | End     | 360                 |
| GI       | none                                | Score   | 222                 |
| Exons    | 40..273, 40..252, 87..272, 307..360 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22428 | Seq. ID | OJ990615_06.9926.C3 |
| Gene No. | 46715 | Strand  | +                   |

|       |                              |        |               |
|-------|------------------------------|--------|---------------|
| Start | 1                            | End    | 956           |
| Name  | OJ990615_06.9926.C3.ol.tm    | Method | TBLASTX:Maize |
| Start | 604                          | End    | 947           |
| GI    | none                         | Score  | 372           |
| Exons | 604..927, 633..914, 831..947 |        |               |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22428                     | Seq. ID | OJ990615_06.9926.C3 |
| Gene No. | 46715                     | Strand  | +                   |
| Start    | 1                         | End     | 956                 |
| Name     | OJ990615_06.9926.C3.ol.tw | Method  | TBLASTX:Wheat       |
| Start    | 607                       | End     | 954                 |
| GI       | none                      | Score   | 323                 |
| Exons    | 607..954, 630..920        |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22429   | Seq. ID | OJ990615_06.9926.C4 |
| Gene No.    | 46716   | Strand  | +                   |
| Start       | 1   | End     | 80                  |
| Name        | OJ990615_06.9926.C4.ol.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 80                  |
| GI          | 6498441   | Score   | 124                 |
| Exons       | 1..80   |         |                     |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22429                     | Seq. ID | OJ990615_06.9926.C4 |
| Gene No. | 46717                     | Strand  | +                   |
| Start    | 18                        | End     | 478                 |
| Name     | OJ990615_06.9926.C4.ol.gs | Method  | GENSCAN             |
| Start    | 18                        | End     | 478                 |
| GI       | none                      | Score   | .6                  |
| Exons    | 18..82, 274..478          |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22430   | Seq. ID | OJ990615_06.9926.C6 |
| Gene No.    | 46718   | Strand  | -                   |
| Start       | 232   | End     | 3664                |
| Name        | OJ990615_06.9926.C6.ol.np                           | Method  | AAT/NAP             |
| Start       | 232   | End     | 3664                |
| GI          | 4680179   | Score   | 3924                |
| Exons       | 232..3664   |         |                     |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22430                                       | Seq. ID | OJ990615_06.9926.C6 |
| Gene No. | 46718                                       | Strand  | -                   |
| Start    | 232   | End     | 3664                |
| Name     | OJ990615_06.9926.C6.ol.gs                   | Method  | GENSCAN             |
| Start    | 261   | End     | 3304                |
| GI       | none  | Score   | .76                 |
| Exons    | 261..494, 504..1709, 1733..2172, 2398..3304 |         |                     |

|          |                              |         |                     |
|----------|------------------------------|---------|---------------------|
| Seq. No. | 22430                        | Seq. ID | OJ990615_06.9926.C6 |
| Gene No. | 46718                        | Strand  | -                   |
| Start    | 232                          | End     | 3664                |
| Name     | OJ990615_06.9926.C6.o5.tw    | Method  | TBLASTX:Wheat       |
| Start    | 276                          | End     | 609                 |
| GI       | none                         | Score   | 155                 |
| Exons    | 276..608, 297..569, 499..609 |         |                     |

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o7.tm  
 Start 291  
 GI none  
 Exons 291..449

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Maize  
 End 449  
 Score 183

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o1.tm  
 Start 459  
 GI none  
 Exons 459..554, 459..896, 469..894, 627..896, 894..1052, 901..1047, 903..1055, 904..1056

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Maize  
 End 1056  
 Score 49

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o1.tw  
 Start 609  
 GI none  
 Exons 609..1235, 610..1179

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Wheat  
 End 1235  
 Score 325

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o3.tm  
 Start 1104  
 GI none  
 Exons 1104..1394, 1107..1322, 1108..1383

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Maize  
 End 1394  
 Score 121

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o2.ts  
 Start 1194  
 GI none  
 Exons 1194..1322, 1194..1442, 1195..1449

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Soybean  
 End 1449  
 Score 71

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o1.tc  
 Start 1218  
 GI none  
 Exons 1218..1361, 1234..1359, 1362..1514, 1362..1535

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Cress  
 End 1535  
 Score 98

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o3.tw  
 Start 1242  
 GI none  
 Exons 1242..1550, 1246..1539, 1574..1768

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Wheat  
 End 1768  
 Score 241



|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22430                              | Seq. ID | OJ990615_06.9926.C6 |
| Gene No. | 46718                              | Strand  | -                   |
| Start    | 232                                | End     | 3664                |
| Name     | OJ990615_06.9926.C6.o2.tm          | Method  | TBLASTX:Maize       |
| Start    | 1811                               | End     | 2164                |
| GI       | none                               | Score   | 69                  |
| Exons    | 1811..2164, 1816..2142, 1863..2162 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22430  | Seq. ID | OJ990615_06.9926.C6 |
| Gene No. | 46718  | Strand  | -                   |
| Start    | 232  | End     | 3664                |
| Name     | OJ990615_06.9926.C6.o2.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 1811   | End     | 2230                |
| GI       | none   | Score   | 120                 |
| Exons    | 1811..2230, 1813..2175, 1826..2179, 1848..2207 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22430                     | Seq. ID | OJ990615_06.9926.C6 |
| Gene No. | 46718                     | Strand  | -                   |
| Start    | 232                       | End     | 3664                |
| Name     | OJ990615_06.9926.C6.o3.ts | Method  | TBLASTX:Soybean     |
| Start    | 1985                      | End     | 2212                |
| GI       | none                      | Score   | 203                 |
| Exons    | 1985..2212                |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22430  | Seq. ID | OJ990615_06.9926.C6 |
| Gene No. | 46718  | Strand  | -                   |
| Start    | 232  | End     | 3664                |
| Name     | OJ990615_06.9926.C6.o5.tm                      | Method  | TBLASTX:Maize       |
| Start    | 2171   | End     | 2515                |
| GI       | none   | Score   | 73                  |
| Exons    | 2171..2203, 2209..2271, 2252..2515, 2313..2483 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22430                              | Seq. ID | OJ990615_06.9926.C6 |
| Gene No. | 46718                              | Strand  | -                   |
| Start    | 232                                | End     | 3664                |
| Name     | OJ990615_06.9926.C6.o6.tw          | Method  | TBLASTX:Wheat       |
| Start    | 2233                               | End     | 2536                |
| GI       | none                               | Score   | 176                 |
| Exons    | 2233..2271, 2261..2536, 2277..2492 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22430  | Seq. ID | OJ990615_06.9926.C6 |
| Gene No. | 46718  | Strand  | -                   |
| Start    | 232  | End     | 3664                |
| Name     | OJ990615_06.9926.C6.o1.ts                                  | Method  | TBLASTX:Soybean     |
| Start    | 2261   | End     | 2644                |
| GI       | none   | Score   | 146                 |
| Exons    | 2261..2608, 2277..2492, 2532..2627, 2612..2644, 2612..2644 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22430                     | Seq. ID | OJ990615_06.9926.C6 |
| Gene No. | 46718                     | Strand  | -                   |
| Start    | 232                       | End     | 3664                |
| Name     | OJ990615_06.9926.C6.o4.tm | Method  | TBLASTX:Maize       |
| Start    | 2531                      | End     | 2998                |
| GI       | none                      | Score   | 133                 |
| Exons    | 2531..2998, 2568..2927    |         |                     |

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o2.tc  
 Start 2549  
 GI none  
 Exons 2549..2938, 2763..2939

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Cress  
 End 2939  
 Score 61

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o4.tw  
 Start 2585  
 GI none  
 Exons 2585..3067, 2594..3040, 2613..3068

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Wheat  
 End 3068  
 Score 198

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o6.tm  
 Start 2999  
 GI none  
 Exons 2999..3196, 3000..3146

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Maize  
 End 3196  
 Score 148

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o7.tw  
 Start 3209  
 GI none  
 Exons 3209..3361, 3264..3383, 3392..3583, 3459..3596

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Wheat  
 End 3596  
 Score 80

Seq. No. 22430  
 Gene No. 46718  
 Start 232  
 Name OJ990615\_06.9926.C6.o8.tm  
 Start 3296  
 GI none  
 Exons 3296..3571, 3507..3596

Seq. ID OJ990615\_06.9926.C6  
 Strand -  
 End 3664  
 Method TBLASTX:Maize  
 End 3596  
 Score 58

Seq. No. 22431  
 Gene No. 46719  
 Start 1  
 Name OJ990615\_06.9926.C7.o1.np  
 Start 1  
 GI 5257279  
 Exons 1..635, 794..855

Seq. ID OJ990615\_06.9926.C7  
 Strand -  
 End 855  
 Method AAT/NAP  
 End 855  
 Score 366

GI Descrip. (AP000364) Similar to Transposon MAGGY gag and pol gene homologues. (L35053) [Oryza sativa]

Seq. No. 22431  
 Gene No. 46719  
 Start 1  
 Name OJ990615\_06.9926.C7.o1.tw  
 Start 27  
 GI none  
 Exons 27..179, 82..201, 210..431, 277..390, 378..431

Seq. ID OJ990615\_06.9926.C7  
 Strand -  
 End 855  
 Method TBLASTX:Wheat  
 End 431  
 Score 80

Seq. No. 22431  
 Gene No. 46719  
 Start 1  
 Name OJ990615\_06.9926.C7.o1.tm  
 Start 114  
 GI none  
 Exons 114..452, 325..384

Seq. ID OJ990615\_06.9926.C7  
 Strand -  
 End 855  
 Method TBLASTX:Maize  
 End 452  
 Score 56

Seq. No. 22431  
 Gene No. 46719  
 Start 1  
 Name OJ990615\_06.9926.C7.o1.gs  
 Start 380  
 GI none  
 Exons 380..785

Seq. ID OJ990615\_06.9926.C7  
 Strand -  
 End 855  
 Method GENSCAN  
 End 785  
 Score .98

Seq. No. 22432  
 Gene No. 46720  
 Start 442  
 Name OJ990615\_06.9926.C11.o1.gs  
 Start 442  
 GI none  
 Exons 442..508

Seq. ID OJ990615\_06.9926.C11  
 Strand +  
 End 508  
 Method GENSCAN  
 End 508  
 Score .43

Seq. No. 22433  
 Gene No. 46721  
 Start 119  
 Name OJ990615\_06.9926.C12.o1.gs  
 Start 119  
 GI none  
 Exons 119..533

Seq. ID OJ990615\_06.9926.C12  
 Strand -  
 End 585  
 Method GENSCAN  
 End 533  
 Score .59

Seq. No. 22433  
 Gene No. 46721  
 Start 119  
 Name OJ990615\_06.9926.C12.o1.np  
 Start 222  
 GI 6498441  
 Exons 222..585

Seq. ID OJ990615\_06.9926.C12  
 Strand -  
 End 585  
 Method AAT/NAP  
 End 585  
 Score 576

GI Descrip. (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa]

Seq. No. 22434  
 Gene No. 46722  
 Start 1  
 Name OJ990615\_06.9926.C13.o1.np  
 Start 1  
 GI 6498441  
 Exons 1..623

Seq. ID OJ990615\_06.9926.C13  
 Strand -  
 End 623  
 Method AAT/NAP  
 End 623  
 Score 976

GI Descrip. (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa]

Seq. No. 22434  
 Gene No. 46722

Seq. ID OJ990615\_06.9926.C13  
 Strand -

Start 1  
 Name OJ990615\_06.9926.C13.o1.gs  
 Start 64  
 GI none  
 Exons 64..176, 285..421, 439..623

End 623  
 Method GENSCAN  
 End 623  
 Score .74

Seq. No. 22434  
 Gene No. 46722  
 Start 1  
 Name OJ990615\_06.9926.C13.o1.tw  
 Start 82  
 GI none  
 Exons 82..339, 125..355, 322..420, 323..403, 427..471

Seq. ID OJ990615\_06.9926.C13  
 Strand -  
 End 623  
 Method TBLASTX:Wheat  
 End 471  
 Score 97

Seq. No. 22434  
 Gene No. 46722  
 Start 1  
 Name OJ990615\_06.9926.C13.o1.tm  
 Start 184  
 GI none  
 Exons 184..432, 185..430

Seq. ID OJ990615\_06.9926.C13  
 Strand -  
 End 623  
 Method TBLASTX:Maize  
 End 432  
 Score 108

Seq. No. 22435  
 Gene No. 46723  
 Start 267  
 Name OJ990615\_06.9926.C14.o1.gs  
 Start 267  
 GI none  
 Exons 267..338

Seq. ID OJ990615\_06.9926.C14  
 Strand +  
 End 338  
 Method GENSCAN  
 End 338  
 Score .44

Seq. No. 22435  
 Gene No. 46724  
 Start 1  
 Name OJ990615\_06.9926.C14.o1.np  
 Start 1  
 GI 4680186  
 Exons 1..394, 567..593  
 GI Descrip. (AF111709) unknown [Oryza sativa subsp. indica]

Seq. ID OJ990615\_06.9926.C14  
 Strand -  
 End 593  
 Method AAT/NAP  
 End 593  
 Score 173

Seq. No. 22436  
 Gene No. 46725  
 Start 154  
 Name OJ990615\_06.9926.C15.o1.gs  
 Start 154  
 GI none  
 Exons 154..291, 432..519, 586..601

Seq. ID OJ990615\_06.9926.C15  
 Strand +  
 End 601  
 Method GENSCAN  
 End 601  
 Score .74

Seq. No. 22436  
 Gene No. 46726  
 Start 1  
 Name OJ990615\_06.9926.C15.o1.np  
 Start 1  
 GI 1196998  
 Exons 1..682  
 GI Descrip. (J01829) unknown protein [Transposon Tn10]  
 gi|5103202|dbj|BAA78838.1| (AP000342) transposase of Tn10  
 [Plasmid R100] gi|5706382|dbj|BAA83097.1| (AB026428) transposase

Seq. ID OJ990615\_06.9926.C15  
 Strand -  
 End 682  
 Method AAT/NAP  
 End 682  
 Score 1193

[Methylomonas aminofaciens] gi|5738092|gb|AAD50250.1|AF162223\_9  
 (AF162223) IS10-right transposase [Shigella flexneri]  
 gi|6721110|gb|AAF26764.1|AC007396\_13 (AC007396) T4O12.21  
 [Arabidopsis thaliana]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22437                      | Seq. ID | OJ990615_06.9926.C16 |
| Gene No. | 46727                      | Strand  | -                    |
| Start    | 247                        | End     | 1497                 |
| Name     | OJ990615_06.9926.C16.o1.gs | Method  | GENSCAN              |
| Start    | 247                        | End     | 1296                 |
| GI       | none                       | Score   | .97                  |
| Exons    | 247..1296                  |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22437  | Seq. ID | OJ990615_06.9926.C16 |
| Gene No.    | 46727  | Strand  | -                    |
| Start       | 247  | End     | 1497                 |
| Name        | OJ990615_06.9926.C16.o1.np   | Method  | AAT/NAP              |
| Start       | 247  | End     | 1497                 |
| GI          | 5702018  | Score   | 1005                 |
| Exons       | 247..465, 493..1497  |         |                      |
| GI Descrip. | (AJ245478) alpha galactosyltransferase [Trigonella foenum-graecum] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22437                                    | Seq. ID | OJ990615_06.9926.C16 |
| Gene No. | 46727                                    | Strand  | -                    |
| Start    | 247                                      | End     | 1497                 |
| Name     | OJ990615_06.9926.C16.o1.ts               | Method  | TBLASTX:Soybean      |
| Start    | 259                                      | End     | 1114                 |
| GI       | none                                     | Score   | 79                   |
| Exons    | 259..450, 260..451, 637..1113, 647..1114 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22437                        | Seq. ID | OJ990615_06.9926.C16 |
| Gene No. | 46727                        | Strand  | -                    |
| Start    | 247                          | End     | 1497                 |
| Name     | OJ990615_06.9926.C16.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 259                          | End     | 457                  |
| GI       | none                         | Score   | 94                   |
| Exons    | 259..285, 301..450, 317..457 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22437  | Seq. ID | OJ990615_06.9926.C16 |
| Gene No. | 46727  | Strand  | -                    |
| Start    | 247  | End     | 1497                 |
| Name     | OJ990615_06.9926.C16.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 280  | End     | 1168                 |
| GI       | none   | Score   | 54                   |
| Exons    | 280..393, 296..361, 412..450, 413..457, 616..981, 647..907, 817..954, 958..1167, 974..1084, 1130..1168 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22437                      | Seq. ID | OJ990615_06.9926.C16 |
| Gene No. | 46727                      | Strand  | -                    |
| Start    | 247                        | End     | 1497                 |
| Name     | OJ990615_06.9926.C16.o1.gp | Method  | AAT/GAP              |
| Start    | 641                        | End     | 843                  |
| GI       | 1632391                    | Score   | 297                  |
| Exons    | 641..843                   |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22437 | Seq. ID | OJ990615_06.9926.C16 |
|----------|-------|---------|----------------------|

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Gene No.    | 46727   | Strand  | -                    |
| Start       | 247   | End     | 1497                 |
| Name        | OJ990615_06.9926.C16.ol.tc                                    | Method  | TBLASTX:Cress.       |
| Start       | 727   | End     | 1209                 |
| GI          | none  | Score   | 80                   |
| Exons       | 727..1209, 734..907, 820..912, 935..1195                      |         |                      |
|             |   |         |                      |
| Seq. No.    | 22438   | Seq. ID | OJ990615_06.9926.C17 |
| Gene No.    | 46728   | Strand  | -                    |
| Start       | 1   | End     | 927                  |
| Name        | OJ990615_06.9926.C17.ol.np                                    | Method  | AAT/NAP              |
| Start       | 1   | End     | 759                  |
| GI          | 4680179   | Score   | 423                  |
| Exons       | 1..759  |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica]           |         |                      |
|             |   |         |                      |
| Seq. No.    | 22438   | Seq. ID | OJ990615_06.9926.C17 |
| Gene No.    | 46728   | Strand  | -                    |
| Start       | 1   | End     | 927                  |
| Name        | OJ990615_06.9926.C17.ol.tm                                    | Method  | TBLASTX:Maize        |
| Start       | 34  | End     | 279                  |
| GI          | none  | Score   | 194                  |
| Exons       | 34..279   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22438   | Seq. ID | OJ990615_06.9926.C17 |
| Gene No.    | 46728   | Strand  | -                    |
| Start       | 1   | End     | 927                  |
| Name        | OJ990615_06.9926.C17.ol.gs                                    | Method  | GENSCAN              |
| Start       | 158   | End     | 927                  |
| GI          | none  | Score   | .64                  |
| Exons       | 158..927  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22438   | Seq. ID | OJ990615_06.9926.C17 |
| Gene No.    | 46728   | Strand  | -                    |
| Start       | 1   | End     | 927                  |
| Name        | OJ990615_06.9926.C17.ol.tw                                    | Method  | TBLASTX:Wheat        |
| Start       | 160   | End     | 537                  |
| GI          | none  | Score   | 262                  |
| Exons       | 160..537  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22439   | Seq. ID | OJ990615_06.9926.C18 |
| Gene No.    | 46729   | Strand  | -                    |
| Start       | 1   | End     | 529                  |
| Name        | OJ990615_06.9926.C18.ol.np                                    | Method  | AAT/NAP              |
| Start       | 1   | End     | 529                  |
| GI          | 6002794   | Score   | 810                  |
| Exons       | 1..529  |         |                      |
| GI Descrip. | (AF149813) unknown [Oryza sativa]                             |         |                      |
|             |   |         |                      |
| Seq. No.    | 22439   | Seq. ID | OJ990615_06.9926.C18 |
| Gene No.    | 46730   | Strand  | -                    |
| Start       | 833   | End     | 1330                 |
| Name        | OJ990615_06.9926.C18.ol.gp                                    | Method  | AAT/GAP              |
| Start       | 833   | End     | 1330                 |
| GI          | 38782_1.R1084   | Score   | 807                  |
| Exons       | 833..1330   |         |                      |
| GI Descrip. | '6069643/dbj AP000616.1 AP000616 0.0e+00 Oryza sativa genomic |         |                      |

DNA, chromosome 6, clone:P0514G12'

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22439  | Seq. ID | OJ990615_06.9926.C18 |
| Gene No.    | 46730  | Strand  | -                    |
| Start       | 833  | End     | 1330                 |
| Name        | OJ990615_06.9926.C18.o2.gs                     | Method  | GENSCAN              |
| Start       | 1119   | End     | 1192                 |
| GI          | none   | Score   | .97                  |
| Exons       | 1119..1192                                     |         |                      |
|             |  |         |                      |
| Seq. No.    | 22440  | Seq. ID | OJ990615_06.9926.C19 |
| Gene No.    | 46731  | Strand  | -                    |
| Start       | 501  | End     | 616                  |
| Name        | OJ990615_06.9926.C19.o1.gs                     | Method  | GENSCAN              |
| Start       | 501  | End     | 616                  |
| GI          | none   | Score   | .59                  |
| Exons       | 501..616                                       |         |                      |
|             |  |         |                      |
| Seq. No.    | 22441  | Seq. ID | OJ990615_06.9926.C20 |
| Gene No.    | 46732  | Strand  | +                    |
| Start       | 50   | End     | 153                  |
| Name        | OJ990615_06.9926.C20.o1.gs                     | Method  | GENSCAN              |
| Start       | 50   | End     | 153                  |
| GI          | none   | Score   | .84                  |
| Exons       | 50..153  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22442  | Seq. ID | OJ990615_06.9926.C21 |
| Gene No.    | 46733  | Strand  | +                    |
| Start       | 1  | End     | 1457                 |
| Name        | OJ990615_06.9926.C21.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 600                  |
| GI          | 5042454  | Score   | 166                  |
| Exons       | 1..185, 540..600                               |         |                      |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22442  | Seq. ID | OJ990615_06.9926.C21 |
| Gene No.    | 46733  | Strand  | +                    |
| Start       | 1  | End     | 1457                 |
| Name        | OJ990615_06.9926.C21.o1.gs                     | Method  | GENSCAN              |
| Start       | 149  | End     | 1457                 |
| GI          | none   | Score   | .6                   |
| Exons       | 149..191, 1176..1457                           |         |                      |
|             |  |         |                      |
| Seq. No.    | 22442  | Seq. ID | OJ990615_06.9926.C21 |
| Gene No.    | 46734  | Strand  | -                    |
| Start       | 2256   | End     | 3632                 |
| Name        | OJ990615_06.9926.C21.o2.gs                     | Method  | GENSCAN              |
| Start       | 2256   | End     | 3629                 |
| GI          | none   | Score   | .46                  |
| Exons       | 2256..2327, 2988..3629                         |         |                      |
|             |  |         |                      |
| Seq. No.    | 22442  | Seq. ID | OJ990615_06.9926.C21 |
| Gene No.    | 46734  | Strand  | -                    |
| Start       | 2256   | End     | 3632                 |
| Name        | OJ990615_06.9926.C21.o2.np                     | Method  | AAT/NAP              |
| Start       | 2981   | End     | 3632                 |
| GI          | 2558660  | Score   | 316                  |

Exons 2981..3632  
GI Descrip. (AC002354) unknown protein [Arabidopsis thaliana]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22442  | Seq. ID | OJ990615_06.9926.C21 |
| Gene No. | 46735  | Strand  | -                    |
| Start    | 4269   | End     | 6185                 |
| Name     | OJ990615_06.9926.C21.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 2925   | End     | 3212                 |
| GI       | none   | Score   | 48                   |
| Exons    | 2925..3020, 2983..3024, 3009..3212, 3022..3204, 3024..3212 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22442                              | Seq. ID | OJ990615_06.9926.C21 |
| Gene No. | 46735                              | Strand  | -                    |
| Start    | 4269                               | End     | 6185                 |
| Name     | OJ990615_06.9926.C21.o1.ts         | Method  | TBLASTX:Soybean      |
| Start    | 2925                               | End     | 3527                 |
| GI       | none                               | Score   | 173                  |
| Exons    | 2925..3263, 2989..3237, 3270..3527 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22442                      | Seq. ID | OJ990615_06.9926.C21 |
| Gene No. | 46735                      | Strand  | -                    |
| Start    | 4269                       | End     | 6185                 |
| Name     | OJ990615_06.9926.C21.o3.gs | Method  | GENSCAN              |
| Start    | 4269                       | End     | 5896                 |
| GI       | none                       | Score   | .51                  |
| Exons    | 4269..4327, 5542..5896     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22442  | Seq. ID | OJ990615_06.9926.C21 |
| Gene No.    | 46735  | Strand  | -                    |
| Start       | 4269   | End     | 6185                 |
| Name        | OJ990615_06.9926.C21.o3.np                     | Method  | AAT/NAP              |
| Start       | 4892   | End     | 6185                 |
| GI          | 6907086  | Score   | 725                  |
| Exons       | 4892..5243, 5358..5413, 5630..5854, 5912..6185 |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22443  | Seq. ID | OJ990615_06.9926.C22 |
| Gene No.    | 46736  | Strand  | -                    |
| Start       | 1  | End     | 1218                 |
| Name        | OJ990615_06.9926.C22.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 1218                 |
| GI          | 6907086  | Score   | 1130                 |
| Exons       | 1..383, 441..1218                              |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22443                      | Seq. ID | OJ990615_06.9926.C22 |
| Gene No. | 46736                      | Strand  | -                    |
| Start    | 1                          | End     | 1218                 |
| Name     | OJ990615_06.9926.C22.o1.gs | Method  | GENSCAN              |
| Start    | 472                        | End     | 922                  |
| GI       | none                       | Score   | .57                  |
| Exons    | 472..591, 654..922         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22443                      | Seq. ID | OJ990615_06.9926.C22 |
| Gene No. | 46737                      | Strand  | -                    |
| Start    | 1305                       | End     | 1497                 |
| Name     | OJ990615_06.9926.C22.o1.gp | Method  | AAT/GAP              |



|             |  |       |      |
|-------------|--|-------|------|
| Start       | 1305   | End   | 1497 |
| GI          | 5667165  | Score | 353  |
| Exons       | 1305..1497   |       |      |
| GI Descrip. | 5670155/gb AF161269.1 AF161269 4.0e-86 Oryza sativa subsp. japonica BAC clone 34K24, complete sequence |       |      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22444                      | Seq. ID | OJ990615_06.9926.C23 |
| Gene No. | 46738                      | Strand  | +                    |
| Start    | 1109                       | End     | 1901                 |
| Name     | OJ990615_06.9926.C23.o1.gs | Method  | GENSCAN              |
| Start    | 1109                       | End     | 1598                 |
| GI       | none                       | Score   | .94                  |
| Exons    | 1109..1118, 1525..1598     |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22444  | Seq. ID | OJ990615_06.9926.C23 |
| Gene No.    | 46738  | Strand  | +                    |
| Start       | 1109   | End     | 1901                 |
| Name        | OJ990615_06.9926.C23.o2.gp   | Method  | AAT/GAP              |
| Start       | 1392   | End     | 1901                 |
| GI          | 38782_1.R1084  | Score   | 841                  |
| Exons       | 1392..1901   |         |                      |
| GI Descrip. | '6069643/dbj AP000616.1 AP000616 0.0e+00 Oryza sativa genomic DNA, chromosome 6, clone:P0514G12' |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22444  | Seq. ID | OJ990615_06.9926.C23 |
| Gene No.    | 46739  | Strand  | -                    |
| Start       | 1  | End     | 1888                 |
| Name        | OJ990615_06.9926.C23.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 1888                 |
| GI          | 6069659  | Score   | 109                  |
| Exons       | 1..62, 234..364, 1854..1888                    |         |                      |
| GI Descrip. | (AP000616) hypothetical protein [Oryza sativa] |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22444  | Seq. ID | OJ990615_06.9926.C23 |
| Gene No.    | 46739  | Strand  | -                    |
| Start       | 1  | End     | 1888                 |
| Name        | OJ990615_06.9926.C23.o2.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 1045                 |
| GI          | 6907088  | Score   | 527                  |
| Exons       | 1..54, 496..733, 909..1045                     |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22444  | Seq. ID | OJ990615_06.9926.C23 |
| Gene No.    | 46739  | Strand  | -                    |
| Start       | 1  | End     | 1888                 |
| Name        | OJ990615_06.9926.C23.o1.gp   | Method  | AAT/GAP              |
| Start       | 56   | End     | 235                  |
| GI          | 5667165  | Score   | 320                  |
| Exons       | 56..235  |         |                      |
| GI Descrip. | 5670155/gb AF161269.1 AF161269 4.0e-86 Oryza sativa subsp. japonica BAC clone 34K24, complete sequence |         |                      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22444                      | Seq. ID | OJ990615_06.9926.C23 |
| Gene No. | 46740                      | Strand  | -                    |
| Start    | 2621                       | End     | 4268                 |
| Name     | OJ990615_06.9926.C23.o3.np | Method  | AAT/NAP              |
| Start    | 2621                       | End     | 4268                 |

GI 4234852 Score 449  
 Exons 2621..2680, 3027..3600, 4225..4268  
 GI Descrip. (AF082133) gag-pol polyprotein [Zea mays]

Seq. No. 22444 Seq. ID OJ990615\_06.9926.C23  
 Gene No. 46740 Strand -  
 Start 2621 End 4268  
 Name OJ990615\_06.9926.C23.o1.tw Method TBLASTX:Wheat  
 Start 3021 End 3444  
 GI none Score 174  
 Exons 3021..3134, 3160..3444

Seq. No. 22444 Seq. ID OJ990615\_06.9926.C23  
 Gene No. 46740 Strand -  
 Start 2621 End 4268  
 Name OJ990615\_06.9926.C23.o1.ts Method TBLASTX:Soybean  
 Start 3021 End 3572  
 GI none Score 60  
 Exons 3021..3143, 3178..3444, 3441..3572

Seq. No. 22444 Seq. ID OJ990615\_06.9926.C23  
 Gene No. 46740 Strand -  
 Start 2621 End 4268  
 Name OJ990615\_06.9926.C23.o1.tm Method TBLASTX:Maize  
 Start 3021 End 3441  
 GI none Score 147  
 Exons 3021..3134, 3226..3441

Seq. No. 22444 Seq. ID OJ990615\_06.9926.C23  
 Gene No. 46740 Strand -  
 Start 2621 End 4268  
 Name OJ990615\_06.9926.C23.o2.gs Method GENSCAN  
 Start 3884 End 4246  
 GI none Score .94  
 Exons 3884..4246

Seq. No. 22445 Seq. ID OJ990615\_06.9926.C25  
 Gene No. 46741 Strand +  
 Start 631 End 11436  
 Name OJ990615\_06.9926.C25.o1.gs Method GENSCAN  
 Start 631 End 11436  
 GI none Score .45  
 Exons 631..874, 906..1048, 1134..1362, 2256..2283, 2761..2858,  
 2960..3552, 3668..3760, 3983..4017, 7046..7196, 9849..10341,  
 10444..10649, 10887..11436

Seq. No. 22445 Seq. ID OJ990615\_06.9926.C25  
 Gene No. 46741 Strand +  
 Start 631 End 11436  
 Name OJ990615\_06.9926.C25.o1.np Method AAT/NAP  
 Start 6905 End 11433  
 GI 6553891 Score 2276  
 Exons 6905..7196, 9849..11433  
 GI Descrip. (AC012563) unknown protein [Arabidopsis thaliana]

Seq. No. 22445 Seq. ID OJ990615\_06.9926.C25  
 Gene No. 46741 Strand +

|             |   |        |         |
|-------------|---|--------|---------|
| Start       | 631   | End    | 11436   |
| Name        | OJ990615_06.9926.C25.o1.gp  | Method | AAT/GAP |
| Start       | 9840  | End    | 10401   |
| GI          | 8275_1.R1084  | Score  | 1085    |
| Exons       | 9840..10401   |        |         |
| GI Descrip. | '3004565 2.0e-36 (AC003673) putative protein kinase [Arabidopsis thaliana]' |        |         |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22445   | Seq. ID | OJ990615_06.9926.C25 |
| Gene No. | 46742   | Strand  | -                    |
| Start    | 10509   | End     | 11638                |
| Name     | OJ990615_06.9926.C25.o2.ts  | Method  | TBLASTX:Soybean      |
| Start    | 7087  | End     | 10403                |
| GI       | none  | Score   | 139                  |
| Exons    | 7087..7194, 7092..7226, 9849..10130, 9850..10131, 9853..10134, 10173..10403, 10189..10398, 10197..10403 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22445  | Seq. ID | OJ990615_06.9926.C25 |
| Gene No. | 46742  | Strand  | -                    |
| Start    | 10509  | End     | 11638                |
| Name     | OJ990615_06.9926.C25.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 7090   | End     | 10446                |
| GI       | none   | Score   | 132                  |
| Exons    | 7090..7194, 7092..7205, 7126..7212, 9849..10091, 9850..10122, 10198..10386, 10200..10388, 10390..10446, 10405..10440 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22445  | Seq. ID | OJ990615_06.9926.C25 |
| Gene No. | 46742  | Strand  | -                    |
| Start    | 10509  | End     | 11638                |
| Name     | OJ990615_06.9926.C25.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 10288  | End     | 10524                |
| GI       | none   | Score   | 88                   |
| Exons    | 10288..10365, 10293..10364, 10361..10519, 10362..10520, 10362..10520, 10363..10524 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22445  | Seq. ID | OJ990615_06.9926.C25 |
| Gene No. | 46742  | Strand  | -                    |
| Start    | 10509  | End     | 11638                |
| Name     | OJ990615_06.9926.C25.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 10450  | End     | 11298                |
| GI       | none   | Score   | 130                  |
| Exons    | 10450..10725, 10457..10723, 10458..11072, 10465..11073, 11179..11298 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22445  | Seq. ID | OJ990615_06.9926.C25 |
| Gene No. | 46742  | Strand  | -                    |
| Start    | 10509  | End     | 11638                |
| Name     | OJ990615_06.9926.C25.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 10450  | End     | 11436                |
| GI       | none   | Score   | 147                  |
| Exons    | 10450..10725, 10519..10644, 10560..11138, 10561..11139, 10795..10959, 11127..11399, 11127..11309, 11128..11415, 11134..11199, 11137..11436, 11224..11295, 11224..11298 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22445 | Seq. ID | OJ990615_06.9926.C25 |
| Gene No. | 46742 | Strand  | -                    |
| Start    | 10509 | End     | 11638                |

|             |  |        |         |
|-------------|--|--------|---------|
| Name        | OJ990615_06.9926.C25.o2.gp   | Method | AAT/GAP |
| Start       | 10509  | End    | 11638   |
| GI          | 1548 1.R1084   | Score  | 2203    |
| Exons       | 10509..11638   |        |         |
| GI Descrip. | '3004565 1.0e-119 (AC003673) putative protein kinase [Arabidopsis thaliana]' |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22445  | Seq. ID | OJ990615_06.9926.C25 |
| Gene No. | 46742  | Strand  | -                    |
| Start    | 10509  | End     | 11638                |
| Name     | OJ990615_06.9926.C25.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 10525  | End     | 11430                |
| GI       | none   | Score   | 72                   |
| Exons    | 10525..10644, 10795..10959, 11009..11080, 11080..11142, 11133..11390, 11133..11309, 11134..11430, 11149..11430 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22446  | Seq. ID | OJ990615_06.9926.C26 |
| Gene No.    | 46743  | Strand  | -                    |
| Start       | 1  | End     | 2070                 |
| Name        | OJ990615_06.9926.C26.o1.gp   | Method  | AAT/GAP              |
| Start       | 1  | End     | 2070                 |
| GI          | 359 1.R1084  | Score   | 867                  |
| Exons       | 1..139, 1105..1227, 1333..1411, 1919..2070   |         |                      |
| GI Descrip. | '2828296/emb CAA16710.1  4.0e-53 (AL021687) RNase L inhibitor-like protein [Arabidopsis thaliana]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22446                                      | Seq. ID | OJ990615_06.9926.C26 |
| Gene No.    | 46743                                      | Strand  | -                    |
| Start       | 1  | End     | 2070                 |
| Name        | OJ990615_06.9926.C26.o1.np                 | Method  | AAT/NAP              |
| Start       | 1  | End     | 2070                 |
| GI          | 1519253                                    | Score   | 694                  |
| Exons       | 1..139, 1105..1227, 1333..1411, 1919..2070 |         |                      |
| GI Descrip. | (U65958) GF14-d protein [Oryza sativa]     |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22446   | Seq. ID | OJ990615_06.9926.C26 |
| Gene No. | 46743   | Strand  | -                    |
| Start    | 1   | End     | 2070                 |
| Name     | OJ990615_06.9926.C26.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 21  | End     | 2070                 |
| GI       | none  | Score   | 71                   |
| Exons    | 21..80, 29..142, 29..139, 31..141, 1094..1228, 1105..1230, 1105..1230, 1163..1231, 1328..1414, 1331..1414, 1332..1421, 1333..1437, 1916..2053, 1918..2070 |         |                      |

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 22446                             | Seq. ID | OJ990615_06.9926.C26 |
| Gene No. | 46743                             | Strand  | -                    |
| Start    | 1                                 | End     | 2070                 |
| Name     | OJ990615_06.9926.C26.o2.tm        | Method  | TBLASTX:Maize        |
| Start    | 21                                | End     | 141                  |
| GI       | none                              | Score   | 86                   |
| Exons    | 21..80, 23..139, 25..141, 25..141 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22446                      | Seq. ID | OJ990615_06.9926.C26 |
| Gene No. | 46743                      | Strand  | -                    |
| Start    | 1                          | End     | 2070                 |
| Name     | OJ990615_06.9926.C26.o2.tc | Method  | TBLASTX:Cress        |

Start 21  
 GI none  
 Exons 21..80, 23..142, 23..139

End 142  
 Score 72

Seq. No. 22446 Seq. ID OJ990615\_06.9926.C26  
 Gene No. 46743 Strand -  
 Start 1 End 2070  
 Name OJ990615\_06.9926.C26.o1.gs Method GENSCAN  
 Start 23 End 1938  
 GI none Score .92  
 Exons 23..139, 1105..1227, 1333..1411, 1919..1938

Seq. No. 22446 Seq. ID OJ990615\_06.9926.C26  
 Gene No. 46743 Strand -  
 Start 1 End 2070  
 Name OJ990615\_06.9926.C26.o1.tw Method TBLASTX:Wheat  
 Start 29 End 1230  
 GI none Score 76  
 Exons 29..139, 30..80, 34..141, 37..141, 38..142, 1105..1230, 1112..1228

Seq. No. 22446 Seq. ID OJ990615\_06.9926.C26  
 Gene No. 46743 Strand -  
 Start 1 End 2070  
 Name OJ990615\_06.9926.C26.o1.tm Method TBLASTX:Maize  
 Start 1043 End 2070  
 GI none Score 214  
 Exons 1043..1228, 1057..1230, 1062..1229, 1075..1230, 1157..1231, 1331..1414, 1331..1414, 1333..1446, 1916..2065, 1916..1960, 1918..2070, 2011..2070

Seq. No. 22446 Seq. ID OJ990615\_06.9926.C26  
 Gene No. 46743 Strand -  
 Start 1 End 2070  
 Name OJ990615\_06.9926.C26.o1.tc Method TBLASTX:Cress  
 Start 1093 End 2064  
 GI none Score 115  
 Exons 1093..1230, 1103..1228, 1331..1411, 1333..1413, 1333..1422, 1933..2064, 1934..2056

Seq. No. 22446 Seq. ID OJ990615\_06.9926.C26  
 Gene No. 46743 Strand -  
 Start 1 End 2070  
 Name OJ990615\_06.9926.C26.o2.tw Method TBLASTX:Wheat  
 Start 1916 End 2070  
 GI none Score 147  
 Exons 1916..2047, 1918..2070

Seq. No. 22447 Seq. ID OJ990615\_06.9926.C27  
 Gene No. 46744 Strand +  
 Start 1869 End 3409  
 Name OJ990615\_06.9926.C27.o1.np Method AAT/NAP  
 Start 1869 End 3409  
 GI 4585708 Score 261  
 Exons 1869..1986, 2140..2178, 2317..2442, 3219..3409  
 GI Descrip. (AJ238117) putative phospholipase A2 [Oryza sativa]

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No.    | 46744  | Strand  | +                    |
| Start       | 1869   | End     | 3409                 |
| Name        | OJ990615_06.9926.C27.o1.gs   | Method  | GENSCAN              |
| Start       | 1881   | End     | 3400                 |
| GI          | none   | Score   | .44                  |
| Exons       | 1881..2017, 2317..2473, 3248..3400   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No.    | 46745  | Strand  | +                    |
| Start       | 10200  | End     | 13992                |
| Name        | OJ990615_06.9926.C27.o3.np   | Method  | AAT/NAP              |
| Start       | 10200  | End     | 13071                |
| GI          | 5803259  | Score   | 1719                 |
| Exons       | 10200..11335, 12440..13071   |         |                      |
| GI Descrip. | (AP000399) hypothetical protein [Oryza sativa]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No.    | 46745  | Strand  | +                    |
| Start       | 10200  | End     | 13992                |
| Name        | OJ990615_06.9926.C27.o4.np   | Method  | AAT/NAP              |
| Start       | 12067  | End     | 13992                |
| GI          | 6907087  | Score   | 1484                 |
| Exons       | 12067..12449, 12658..13350, 13891..13992   |         |                      |
| GI Descrip. | (AP001129) ESTs C72771(E2215),AU082313(E2215) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No.    | 46746  | Strand  | +                    |
| Start       | 14559  | End     | 19609                |
| Name        | OJ990615_06.9926.C27.o1.gp   | Method  | AAT/GAP              |
| Start       | 14454  | End     | 14838                |
| GI          | uC-osflcyp033a04b1   | Score   | 674                  |
| Exons       | 14454..14838   |         |                      |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10'                                 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No.    | 46746  | Strand  | +                    |
| Start       | 14559  | End     | 19609                |
| Name        | OJ990615_06.9926.C27.o4.gs   | Method  | GENSCAN              |
| Start       | 14559  | End     | 17221                |
| GI          | none   | Score   | .42                  |
| Exons       | 14559..14624, 16070..17221   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No.    | 46746  | Strand  | +                    |
| Start       | 14559  | End     | 19609                |
| Name        | OJ990615_06.9926.C27.o6.np   | Method  | AAT/NAP              |
| Start       | 16049  | End     | 19609                |
| GI          | 4680179  | Score   | 590                  |
| Exons       | 16049..16908, 17071..17315, 18761..18840, 19548..19609   |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No.    | 46747  | Strand  | -                    |

|       |                            |        |                 |
|-------|----------------------------|--------|-----------------|
| Start | 5329                       | End    | 19609           |
| Name  | OJ990615_06.9926.C27.o1.ts | Method | TBLASTX:Soybean |
| Start | 2310                       | End    | 2461            |
| GI    | none                       | Score  | 192             |
| Exons | 2310..2459, 2315..2461     |        |                 |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No. | 46747  | Strand  | -                    |
| Start    | 5329   | End     | 19609                |
| Name     | OJ990615_06.9926.C27.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 2310   | End     | 3394                 |
| GI       | none   | Score   | 186                  |
| Exons    | 2310..2450, 2315..2428, 2319..2441, 2320..2460, 3207..3242, 3218..3274, 3298..3387, 3299..3394 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No. | 46747  | Strand  | -                    |
| Start    | 5329   | End     | 19609                |
| Name     | OJ990615_06.9926.C27.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 2315   | End     | 3376                 |
| GI       | none   | Score   | 189                  |
| Exons    | 2315..2467, 2322..2456, 3209..3265, 3299..3376 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No. | 46747  | Strand  | -                    |
| Start    | 5329   | End     | 19609                |
| Name     | OJ990615_06.9926.C27.o2.gs   | Method  | GENSCAN              |
| Start    | 5329   | End     | 9209                 |
| GI       | none   | Score   | .48                  |
| Exons    | 5329..5454, 6513..6724, 6803..6840, 8377..8546, 8765..8851, 8950..8996, 9152..9209 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22447  | Seq. ID | OJ990615_06.9926.C27 |
| Gene No.    | 46747  | Strand  | -                    |
| Start       | 5329   | End     | 19609                |
| Name        | OJ990615_06.9926.C27.o2.np   | Method  | AAT/NAP              |
| Start       | 8493   | End     | 19609                |
| GI          | 5042454  | Score   | 206                  |
| Exons       | 8493..8553, 8956..9124, 9815..9871, 11068..11301, 11737..11850, 19484..19609 |         |                      |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa]                               |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22447   | Seq. ID | OJ990615_06.9926.C27 |
| Gene No.    | 46747   | Strand  | -                    |
| Start       | 5329  | End     | 19609                |
| Name        | OJ990615_06.9926.C27.o5.np                      | Method  | AAT/NAP              |
| Start       | 14383   | End     | 14587                |
| GI          | 4680186   | Score   | 229                  |
| Exons       | 14383..14587                                    |         |                      |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22447                      | Seq. ID | OJ990615_06.9926.C27 |
| Gene No. | 46747                      | Strand  | -                    |
| Start    | 5329                       | End     | 19609                |
| Name     | OJ990615_06.9926.C27.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 16292                      | End     | 16651                |
| GI       | none                       | Score   | 280                  |

Exons 16292..16651, 16294..16647

Seq. No. 22447  
Gene No. 46747  
Start 5329  
Name OJ990615\_06.9926.C27.o1.tm  
Start 16532  
GI none  
Exons 16532..16834, 16546..16635

Seq. ID OJ990615\_06.9926.C27  
Strand -  
End 19609  
Method TBLASTX:Maize  
End 16834  
Score 224

Seq. No. 22448  
Gene No. 46748  
Start 1  
Name OJ990615\_06.9926.C28.o1.np  
Start 1  
GI 6539586  
Exons 1..544, 1306..1410  
GI Descrip. (AP000837) hypothetical protein [Oryza sativa]

Seq. ID OJ990615\_06.9926.C28  
Strand +  
End 1410  
Method AAT/NAP  
End 1410  
Score 774

Seq. No. 22448  
Gene No. 46748  
Start 1  
Name OJ990615\_06.9926.C28.o1.gs  
Start 104  
GI none  
Exons 104..186, 288..641

Seq. ID OJ990615\_06.9926.C28  
Strand +  
End 1410  
Method GENSCAN  
End 641  
Score .55

Seq. No. 22448  
Gene No. 46749  
Start 1274  
Name OJ990615\_06.9926.C28.o2.np  
Start 1238  
GI 4680185  
Exons 1238..1678  
GI Descrip. (AF111709) unknown [Oryza sativa subsp. indica]

Seq. ID OJ990615\_06.9926.C28  
Strand -  
End 1678  
Method AAT/NAP  
End 1678  
Score 469

Seq. No. 22448  
Gene No. 46749  
Start 1274  
Name OJ990615\_06.9926.C28.o2.gs  
Start 1274  
GI none  
Exons 1274..1633

Seq. ID OJ990615\_06.9926.C28  
Strand -  
End 1678  
Method GENSCAN  
End 1633  
Score .73

Seq. No. 22449  
Gene No. 46750  
Start 201  
Name OJ990615\_06.9926.C30.o1.gp  
Start 201  
GI uC-osflcyp033a04b1  
Exons 201..582  
GI Descrip. '6016845/dbj|AP000570.1|AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10'

Seq. ID OJ990615\_06.9926.C30  
Strand +  
End 582  
Method AAT/GAP  
End 582  
Score 659

Seq. No. 22449  
Gene No. 46751  
Start 102

Seq. ID OJ990615\_06.9926.C30  
Strand -  
End 484



|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990615_06.9926.C30.o1.gs                         | Method  | GENSCAN              |
| Start       | 102  | End     | 484                  |
| GI          | none   | Score   | .73                  |
| Exons       | 102..332, 431..484                                 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22449  | Seq. ID | OJ990615_06.9926.C30 |
| Gene No.    | 46751  | Strand  | -                    |
| Start       | 102  | End     | 484                  |
| Name        | OJ990615_06.9926.C30.o1.np                         | Method  | AAT/NAP              |
| Start       | 130  | End     | 340                  |
| GI          | 4680186  | Score   | 233                  |
| Exons       | 130..340   |         |                      |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica]    |         |                      |
|             |  |         |                      |
| Seq. No.    | 22449  | Seq. ID | OJ990615_06.9926.C30 |
| Gene No.    | 46752  | Strand  | -                    |
| Start       | 431  | End     | 484                  |
| Name        | OJ990615_06.9926.C30.o2.np                         | Method  | AAT/NAP              |
| Start       | 431  | End     | 484                  |
| GI          | 5852180  | Score   | 37                   |
| Exons       | 431..484   |         |                      |
| GI Descrip. | (AL117265) zhb00010.1 [Oryza sativa]               |         |                      |
|             |  |         |                      |
| Seq. No.    | 22450  | Seq. ID | OJ990615_06.9926.C31 |
| Gene No.    | 46753  | Strand  | +                    |
| Start       | 266  | End     | 598                  |
| Name        | OJ990615_06.9926.C31.o1.gs                         | Method  | GENSCAN              |
| Start       | 266  | End     | 598                  |
| GI          | none   | Score   | .72                  |
| Exons       | 266..522, 567..598                                 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22451  | Seq. ID | OJ990615_06.9926.C32 |
| Gene No.    | 46754  | Strand  | -                    |
| Start       | 1  | End     | 256                  |
| Name        | OJ990615_06.9926.C32.o1.np                         | Method  | AAT/NAP              |
| Start       | 1  | End     | 256                  |
| GI          | 3021268  | Score   | 45                   |
| Exons       | 1..22, 159..256                                    |         |                      |
| GI Descrip. | (AL022347) putative protein [Arabidopsis thaliana] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22451  | Seq. ID | OJ990615_06.9926.C32 |
| Gene No.    | 46755  | Strand  | -                    |
| Start       | 159  | End     | 429                  |
| Name        | OJ990615_06.9926.C32.o1.gs                         | Method  | GENSCAN              |
| Start       | 159  | End     | 429                  |
| GI          | none   | Score   | .57                  |
| Exons       | 159..271, 411..429                                 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22452  | Seq. ID | OJ990615_06.9926.C33 |
| Gene No.    | 46756  | Strand  | +                    |
| Start       | 126  | End     | 731                  |
| Name        | OJ990615_06.9926.C33.o1.gs                         | Method  | GENSCAN              |
| Start       | 126  | End     | 711                  |
| GI          | none   | Score   | .88                  |
| Exons       | 126..271, 338..711                                 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22452  | Seq. ID | OJ990615_06.9926.C33 |

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 46756  | Strand | +       |
| Start       | 126  | End    | 731     |
| Name        | OJ990615_06.9926.C33.o1.np                     | Method | AAT/NAP |
| Start       | 142  | End    | 731     |
| GI          | 6907089  | Score  | 946     |
| Exons       | 142..731                                       |        |         |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |        |         |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No.    | 46757  | Strand  | +                    |
| Start       | 1  | End     | 2630                 |
| Name        | OJ990615_06.9926.C34.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 2627                 |
| GI          | 6907089  | Score   | 3320                 |
| Exons       | 1..657, 758..2627                              |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22453                        | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46757                        | Strand  | +                    |
| Start    | 1                            | End     | 2630                 |
| Name     | OJ990615_06.9926.C34.o1.gs   | Method  | GENSCAN              |
| Start    | 41                           | End     | 2630                 |
| GI       | none                         | Score   | .79                  |
| Exons    | 41..461, 489..657, 758..2630 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758  | Strand  | -                    |
| Start    | 3251   | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o2.gs   | Method  | GENSCAN              |
| Start    | 3251   | End     | 10889                |
| GI       | none   | Score   | .47                  |
| Exons    | 3251..6787, 6851..8262, 8371..8561, 8605..9286, 9323..9493, 9849..9891, 10174..10231, 10852..10889 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22453   | Seq. ID | OJ990615_06.9926.C34 |
| Gene No.    | 46758   | Strand  | -                    |
| Start       | 3251  | End     | 11541                |
| Name        | OJ990615_06.9926.C34.o2.np  | Method  | AAT/NAP              |
| Start       | 3254  | End     | 8710                 |
| GI          | 6498441   | Score   | 7290                 |
| Exons       | 3254..3535, 3629..5026, 5198..5921, 6096..6230, 6414..6787, 6851..7314, 7645..8710  |         |                      |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758  | Strand  | -                    |
| Start    | 3251   | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o6.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 3263   | End     | 3865                 |
| GI       | none   | Score   | 76                   |
| Exons    | 3263..3388, 3267..3389, 3581..3865, 3582..3860 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22453 | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758 | Strand  | -                    |
| Start    | 3251  | End     | 11541                |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Name     | OJ990615_06.9926.C34.o4.tw   | Method  | TBLASTX:Wheat        |
| Start    | 3866   | End     | 8303                 |
| GI       | none   | Score   | 239                  |
| Exons    | 3866..4246, 3897..4247, 8223..8303                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758  | Strand  | -                    |
| Start    | 3251   | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 4052   | End     | 4384                 |
| GI       | none   | Score   | 82                   |
| Exons    | 4052..4264, 4061..4384, 4074..4355                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758  | Strand  | -                    |
| Start    | 3251   | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o8.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4577   | End     | 4889                 |
| GI       | none   | Score   | 64                   |
| Exons    | 4577..4825, 4713..4889   |         |                      |
|          |  |         |                      |
| Seq. No. | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758  | Strand  | -                    |
| Start    | 3251   | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o5.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4892   | End     | 5350                 |
| GI       | none   | Score   | 81                   |
| Exons    | 4892..5041, 4893..5030, 4907..5032, 5075..5326, 5076..5261, 5096..5350 |         |                      |
|          |  |         |                      |
| Seq. No. | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758  | Strand  | -                    |
| Start    | 3251   | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 5759   | End     | 6130                 |
| GI       | none   | Score   | 90                   |
| Exons    | 5759..6130, 5970..6113   |         |                      |
|          |  |         |                      |
| Seq. No. | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758  | Strand  | -                    |
| Start    | 3251   | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 5789   | End     | 6209                 |
| GI       | none   | Score   | 298                  |
| Exons    | 5789..6208, 5814..6209   |         |                      |
|          |  |         |                      |
| Seq. No. | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758  | Strand  | -                    |
| Start    | 3251   | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 5882   | End     | 6266                 |
| GI       | none   | Score   | 236                  |
| Exons    | 5882..6265, 5901..6266   |         |                      |
|          |  |         |                      |
| Seq. No. | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758  | Strand  | -                    |
| Start    | 3251   | End     | 11541                |

|       |                                    |        |               |
|-------|------------------------------------|--------|---------------|
| Name  | OJ990615_06.9926.C34.o1.tm         | Method | TBLASTX:Maize |
| Start | 6293                               | End    | 6649          |
| GI    | none                               | Score  | 73            |
| Exons | 6293..6409, 6293..6649, 6303..6614 |        |               |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22453                              | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758                              | Strand  | -                    |
| Start    | 3251                               | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o1.tw         | Method  | TBLASTX:Wheat        |
| Start    | 6317                               | End     | 6779                 |
| GI       | none                               | Score   | 218                  |
| Exons    | 6317..6778, 6323..6778, 6324..6779 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22453                      | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758                      | Strand  | -                    |
| Start    | 3251                       | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 6374                       | End     | 6739                 |
| GI       | none                       | Score   | 117                  |
| Exons    | 6374..6508, 6515..6739     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22453                              | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758                              | Strand  | -                    |
| Start    | 3251                               | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o3.tw         | Method  | TBLASTX:Wheat        |
| Start    | 6944                               | End     | 7430                 |
| GI       | none                               | Score   | 160                  |
| Exons    | 6944..7429, 6975..7235, 7257..7430 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22453                              | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758                              | Strand  | -                    |
| Start    | 3251                               | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o4.tm         | Method  | TBLASTX:Maize        |
| Start    | 8270                               | End     | 8554                 |
| GI       | none                               | Score   | 108                  |
| Exons    | 8270..8518, 8271..8516, 8282..8554 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No. | 46758  | Strand  | -                    |
| Start    | 3251   | End     | 11541                |
| Name     | OJ990615_06.9926.C34.o7.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 8304   | End     | 8563                 |
| GI       | none   | Score   | 74                   |
| Exons    | 8304..8441, 8306..8425, 8408..8506, 8409..8489, 8513..8563 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22453  | Seq. ID | OJ990615_06.9926.C34 |
| Gene No.    | 46758  | Strand  | -                    |
| Start       | 3251   | End     | 11541                |
| Name        | OJ990615_06.9926.C34.o3.np                     | Method  | AAT/NAP              |
| Start       | 9440   | End     | 11541                |
| GI          | 5042454  | Score   | 177                  |
| Exons       | 9440..9500, 9855..10021, 11504..11541          |         |                      |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22454 | Seq. ID | OJ990615_06.9926.C35 |
| Gene No. | 46759 | Strand  | -                    |
| Start    | 1     | End     | 1760                 |

|             |   |        |         |
|-------------|---|--------|---------|
| Name        | OJ990615_06.9926.C35.o1.np  | Method | AAT/NAP |
| Start       | 1   | End    | 891     |
| GI          | 6721562   | Score  | 1107    |
| Exons       | 1..891  |        |         |
| GI Descrip. | (AP001073) Similar to Zea mays 22-kDa alpha zein gene cluster; hypothetical protein. (AF031569) [Oryza sativa]<br>gi 6815087 dbj BAA90373.1  (AP001081) Similar to Zea mays 22-kDa alpha zein gene cluster; hypothetical protein. (AF031569) [Oryza sativa] |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22454                                      | Seq. ID | OJ990615_06.9926.C35 |
| Gene No. | 46759                                      | Strand  | -                    |
| Start    | 1  | End     | 1760                 |
| Name     | OJ990615_06.9926.C35.o1.gs                 | Method  | GENSCAN              |
| Start    | 91   | End     | 1627                 |
| GI       | none                                       | Score   | .78                  |
| Exons    | 91..909, 963..1169, 1396..1482, 1581..1627 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22454  | Seq. ID | OJ990615_06.9926.C35 |
| Gene No.    | 46759  | Strand  | -                    |
| Start       | 1  | End     | 1760                 |
| Name        | OJ990615_06.9926.C35.o2.np                     | Method  | AAT/NAP              |
| Start       | 1116   | End     | 1760                 |
| GI          | 5042454  | Score   | 178                  |
| Exons       | 1116..1176, 1587..1760                         |         |                      |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22455                      | Seq. ID | OJ990615_06.9926.C36 |
| Gene No. | 46760                      | Strand  | +                    |
| Start    | 2956                       | End     | 3059                 |
| Name     | OJ990615_06.9926.C36.o1.gp | Method  | AAT/GAP              |
| Start    | 2956                       | End     | 3059                 |
| GI       | 2312354                    | Score   | 169                  |
| Exons    | 2956..3059                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22456                      | Seq. ID | OJ990615_06.9926.C37 |
| Gene No. | 46761                      | Strand  | +                    |
| Start    | 551                        | End     | 670                  |
| Name     | OJ990615_06.9926.C37.o1.gs | Method  | GENSCAN              |
| Start    | 551                        | End     | 670                  |
| GI       | none                       | Score   | .73                  |
| Exons    | 551..670                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22457                      | Seq. ID | OJ990615_06.9926.C38 |
| Gene No. | 46762                      | Strand  | +                    |
| Start    | 71                         | End     | 190                  |
| Name     | OJ990615_06.9926.C38.o1.gs | Method  | GENSCAN              |
| Start    | 71                         | End     | 190                  |
| GI       | none                       | Score   | .78                  |
| Exons    | 71..190                    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22457                      | Seq. ID | OJ990615_06.9926.C38 |
| Gene No. | 46763                      | Strand  | +                    |
| Start    | 3941                       | End     | 5085                 |
| Name     | OJ990615_06.9926.C38.o3.gs | Method  | GENSCAN              |
| Start    | 3941                       | End     | 5085                 |
| GI       | none                       | Score   | .78                  |

Exons 3941..4381, 4942..5085

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22457                              | Seq. ID | OJ990615_06.9926.C38 |
| Gene No. | 46764                              | Strand  | -                    |
| Start    | 2685                               | End     | 3434                 |
| Name     | OJ990615_06.9926.C38.o2.gs         | Method  | GENSCAN              |
| Start    | 2685                               | End     | 3434                 |
| GI       | none                               | Score   | .49                  |
| Exons    | 2685..2899, 3023..3227, 3300..3434 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22457  | Seq. ID | OJ990615_06.9926.C38 |
| Gene No. | 46764  | Strand  | -                    |
| Start    | 2685   | End     | 3434                 |
| Name     | OJ990615_06.9926.C38.o2.tm                     | Method  | TBLASTX:Maize        |
| Start    | 2895   | End     | 3380                 |
| GI       | none   | Score   | 76                   |
| Exons    | 2895..3191, 2983..3171, 3033..3173, 3318..3380 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22457  | Seq. ID | OJ990615_06.9926.C38 |
| Gene No. | 46765  | Strand  | -                    |
| Start    | 4223   | End     | 5485                 |
| Name     | OJ990615_06.9926.C38.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 4223   | End     | 5485                 |
| GI       | none   | Score   | 257                  |
| Exons    | 4223..4381, 4288..4371, 4971..5084, 4972..5085, 4993..5085, 5413..5484, 5414..5485 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22458  | Seq. ID | OJ990615_06.9926.C39 |
| Gene No.    | 46766  | Strand  | +                    |
| Start       | 56   | End     | 271                  |
| Name        | OJ990615_06.9926.C39.o1.gp   | Method  | AAT/GAP              |
| Start       | 56   | End     | 271                  |
| GI          | 1548_1.R1084   | Score   | 365                  |
| Exons       | 56..271  |         |                      |
| GI Descrip. | '3004565 1.0e-119 (AC003673) putative protein kinase [Arabidopsis thaliana]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22458                                  | Seq. ID | OJ990615_06.9926.C39 |
| Gene No.    | 46767                                  | Strand  | -                    |
| Start       | 1                                      | End     | 732                  |
| Name        | OJ990615_06.9926.C39.o1.np             | Method  | AAT/NAP              |
| Start       | 1                                      | End     | 732                  |
| GI          | 6960305                                | Score   | 828                  |
| Exons       | 1..732                                 |         |                      |
| GI Descrip. | (AF216523) FKF1 [Arabidopsis thaliana] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22458   | Seq. ID | OJ990615_06.9926.C39 |
| Gene No. | 46767   | Strand  | -                    |
| Start    | 1   | End     | 732                  |
| Name     | OJ990615_06.9926.C39.o2.ts                            | Method  | TBLASTX:Soybean      |
| Start    | 56  | End     | 330                  |
| GI       | none  | Score   | 99                   |
| Exons    | 56..142, 82..330, 82..219, 85..213, 98..220, 136..261 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22458 | Seq. ID | OJ990615_06.9926.C39 |
| Gene No. | 46767 | Strand  | -                    |
| Start    | 1     | End     | 732                  |

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990615_06.9926.C39.o1.tm   | Method | TBLASTX:Maize |
| Start | 95   | End    | 456           |
| GI    | none   | Score  | 366           |
| Exons | 95..322, 97..321, 103..324, 104..322, 105..335, 319..456, 322..456 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22458                      | Seq. ID | OJ990615_06.9926.C39 |
| Gene No. | 46767                      | Strand  | -                    |
| Start    | 1                          | End     | 732                  |
| Name     | OJ990615_06.9926.C39.o1.gs | Method  | GENSCAN              |
| Start    | 131                        | End     | 668                  |
| GI       | none                       | Score   | .53                  |
| Exons    | 131..668                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22458  | Seq. ID | OJ990615_06.9926.C39 |
| Gene No. | 46767  | Strand  | -                    |
| Start    | 1  | End     | 732                  |
| Name     | OJ990615_06.9926.C39.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 169  | End     | 492                  |
| GI       | none   | Score   | 246                  |
| Exons    | 169..417, 170..373, 187..423, 191..421, 415..492, 418..471, 425..487 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22458  | Seq. ID | OJ990615_06.9926.C39 |
| Gene No. | 46767  | Strand  | -                    |
| Start    | 1  | End     | 732                  |
| Name     | OJ990615_06.9926.C39.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 377  | End     | 732                  |
| GI       | none   | Score   | 52                   |
| Exons    | 377..583, 378..443, 382..591, 421..600, 422..607, 649..732, 650..730 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22458   | Seq. ID | OJ990615_06.9926.C39 |
| Gene No.    | 46767   | Strand  | -                    |
| Start       | 1   | End     | 732                  |
| Name        | OJ990615_06.9926.C39.o2.gp  | Method  | AAT/GAP              |
| Start       | 379   | End     | 732                  |
| GI          | 8275 1.R1084  | Score   | 681                  |
| Exons       | 379..732  |         |                      |
| GI Descrip. | '3004565 2.0e-36 (AC003673) putative protein kinase [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22458                                  | Seq. ID | OJ990615_06.9926.C39 |
| Gene No. | 46767                                  | Strand  | -                    |
| Start    | 1                                      | End     | 732                  |
| Name     | OJ990615_06.9926.C39.o2.tm             | Method  | TBLASTX:Maize        |
| Start    | 470                                    | End     | 732                  |
| GI       | none                                   | Score   | 112                  |
| Exons    | 470..550, 472..537, 536..730, 544..732 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22459                      | Seq. ID | OJ990615_06.9926.C40 |
| Gene No. | 46768                      | Strand  | +                    |
| Start    | 1                          | End     | 989                  |
| Name     | OJ990615_06.9926.C40.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 989                  |
| GI       | 6907089                    | Score   | 366                  |
| Exons    | 1..62, 503..627, 731..989  |         |                      |

GI Descrip. (AP001129) hypothetical protein [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22459                      | Seq. ID | OJ990615_06.9926.C40 |
| Gene No. | 46768                      | Strand  | +                    |
| Start    | 1                          | End     | 989                  |
| Name     | OJ990615_06.9926.C40.o1.gs | Method  | GENSCAN              |
| Start    | 417                        | End     | 894                  |
| GI       | none                       | Score   | .53                  |
| Exons    | 417..627, 731..894         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22460  | Seq. ID | OJ990615_06.9926.C41 |
| Gene No.    | 46769  | Strand  | +                    |
| Start       | 1  | End     | 1089                 |
| Name        | OJ990615_06.9926.C41.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 1089                 |
| GI          | 6907089  | Score   | 1143                 |
| Exons       | 1..486, 592..1089                              |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22460                                  | Seq. ID | OJ990615_06.9926.C41 |
| Gene No. | 46769                                  | Strand  | +                    |
| Start    | 1                                      | End     | 1089                 |
| Name     | OJ990615_06.9926.C41.o1.gs             | Method  | GENSCAN              |
| Start    | 11                                     | End     | 1010                 |
| GI       | none                                   | Score   | .55                  |
| Exons    | 11..212, 318..486, 592..745, 875..1010 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22461  | Seq. ID | OJ990615_06.9926.C42 |
| Gene No.    | 46770  | Strand  | -                    |
| Start       | 1  | End     | 670                  |
| Name        | OJ990615_06.9926.C42.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 670                  |
| GI          | 5042454  | Score   | 84                   |
| Exons       | 1..30, 84..175, 553..670                       |         |                      |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22461                      | Seq. ID | OJ990615_06.9926.C42 |
| Gene No. | 46770                      | Strand  | -                    |
| Start    | 1                          | End     | 670                  |
| Name     | OJ990615_06.9926.C42.o1.gs | Method  | GENSCAN              |
| Start    | 177                        | End     | 494                  |
| GI       | none                       | Score   | .63                  |
| Exons    | 177..290, 461..494         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22461  | Seq. ID | OJ990615_06.9926.C42 |
| Gene No.    | 46770  | Strand  | -                    |
| Start       | 1  | End     | 670                  |
| Name        | OJ990615_06.9926.C42.o2.np                     | Method  | AAT/NAP              |
| Start       | 237  | End     | 670                  |
| GI          | 5042454  | Score   | 75                   |
| Exons       | 237..292, 575..670                             |         |                      |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22462                      | Seq. ID | OJ990615_06.9926.C43 |
| Gene No. | 46771                      | Strand  | +                    |
| Start    | 1                          | End     | 905                  |
| Name     | OJ990615_06.9926.C43.o1.np | Method  | AAT/NAP              |



|             |   |       |     |
|-------------|---|-------|-----|
| Start       | 1   | End   | 905 |
| GI          | 6498441   | Score | 844 |
| Exons       | 1..35, 219..353, 528..905   |       |     |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |       |     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22462                      | Seq. ID | OJ990615_06.9926.C43 |
| Gene No. | 46771                      | Strand  | +                    |
| Start    | 1                          | End     | 905                  |
| Name     | OJ990615_06.9926.C43.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 25                         | End     | 239                  |
| GI       | none                       | Score   | 233                  |
| Exons    | 25..237, 27..239           |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22462                      | Seq. ID | OJ990615_06.9926.C43 |
| Gene No. | 46771                      | Strand  | +                    |
| Start    | 1                          | End     | 905                  |
| Name     | OJ990615_06.9926.C43.o1.gs | Method  | GENSCAN              |
| Start    | 59                         | End     | 843                  |
| GI       | none                       | Score   | .81                  |
| Exons    | 59..843                    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22462                      | Seq. ID | OJ990615_06.9926.C43 |
| Gene No. | 46771                      | Strand  | +                    |
| Start    | 1                          | End     | 905                  |
| Name     | OJ990615_06.9926.C43.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 183                        | End     | 567                  |
| GI       | none                       | Score   | 364                  |
| Exons    | 183..548, 184..567         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22462                      | Seq. ID | OJ990615_06.9926.C43 |
| Gene No. | 46771                      | Strand  | +                    |
| Start    | 1                          | End     | 905                  |
| Name     | OJ990615_06.9926.C43.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 240                        | End     | 660                  |
| GI       | none                       | Score   | 496                  |
| Exons    | 240..635, 241..660         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22462                      | Seq. ID | OJ990615_06.9926.C43 |
| Gene No. | 46771                      | Strand  | +                    |
| Start    | 1                          | End     | 905                  |
| Name     | OJ990615_06.9926.C43.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 319                        | End     | 690                  |
| GI       | none                       | Score   | 285                  |
| Exons    | 319..690, 336..479         |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22463   | Seq. ID | OJ990615_06.9926.C44 |
| Gene No.    | 46772   | Strand  | -                    |
| Start       | 351   | End     | 719                  |
| Name        | OJ990615_06.9926.C44.o1.np                          | Method  | AAT/NAP              |
| Start       | 342   | End     | 719                  |
| GI          | 4585708   | Score   | 82                   |
| Exons       | 342..537, 688..719                                  |         |                      |
| GI Descrip. | (AJ238117) putative phospholipase A2 [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22463 | Seq. ID | OJ990615_06.9926.C44 |
|----------|-------|---------|----------------------|

|          |                            |        |         |
|----------|----------------------------|--------|---------|
| Gene No. | 46772                      | Strand | -       |
| Start    | 351                        | End    | 719     |
| Name     | OJ990615_06.9926.C44.o1.gs | Method | GENSCAN |
| Start    | 351                        | End    | 669     |
| GI       | none                       | Score  | .47     |
| Exons    | 351..503, 541..669         |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22464                      | Seq. ID | OJ990615_06.9926.C46 |
| Gene No. | 46773                      | Strand  | -                    |
| Start    | 1                          | End     | 721                  |
| Name     | OJ990615_06.9926.C46.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 721                  |
| GI       | 6498441                    | Score   | 622                  |
| Exons    | 1..241, 572..721           |         |                      |

GI Descrip. (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa]

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22464                       | Seq. ID | OJ990615_06.9926.C46 |
| Gene No. | 46773                       | Strand  | -                    |
| Start    | 1                           | End     | 721                  |
| Name     | OJ990615_06.9926.C46.o1.gs  | Method  | GENSCAN              |
| Start    | 12                          | End     | 663                  |
| GI       | none                        | Score   | .78                  |
| Exons    | 12..130, 161..368, 483..663 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22464                      | Seq. ID | OJ990615_06.9926.C46 |
| Gene No. | 46773                      | Strand  | -                    |
| Start    | 1                          | End     | 721                  |
| Name     | OJ990615_06.9926.C46.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 12                         | End     | 353                  |
| GI       | none                       | Score   | 85                   |
| Exons    | 12..353, 55..162, 184..345 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22465                      | Seq. ID | OJ990615_06.9926.C47 |
| Gene No. | 46774                      | Strand  | -                    |
| Start    | 541                        | End     | 704                  |
| Name     | OJ990615_06.9926.C47.o1.gs | Method  | GENSCAN              |
| Start    | 541                        | End     | 655                  |
| GI       | none                       | Score   | .94                  |
| Exons    | 541..655                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22465  | Seq. ID | OJ990615_06.9926.C47 |
| Gene No.    | 46774  | Strand  | -                    |
| Start       | 541  | End     | 704                  |
| Name        | OJ990615_06.9926.C47.o1.np                     | Method  | AAT/NAP              |
| Start       | 544  | End     | 704                  |
| GI          | 6907089  | Score   | 200                  |
| Exons       | 544..704                                       |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22466                     | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775                     | Strand  | -                   |
| Start    | 348                       | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o1.gp | Method  | AAT/GAP             |
| Start    | 348                       | End     | 7982                |
| GI       | 42_1.R1084                | Score   | 9114                |

Exons 348..1822, 2043..2204, 2319..2473, 3002..3871, 4170..4639, 4724..4787, 4911..5254, 5337..5516, 5623..5726, 5859..5968, 6454..6550, 6944..7044, 7130..7282, 7367..7480, 7571..7690, 7766..7982

GI Descrip. '2252840 3.0e-09 (AF013293) contains regions of similarity to Haemophilus influenzae permease (SP:P38767) [Arabidopsis thaliana] >gi\_6049882\_gb\_AAF02797.1\_AF195115\_17 (AF195115) contains regions of similarity to Haemophilus influenzae permease (SP:P38767) [Arabidopsis thaliana]'

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466                                  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775                                  | Strand  | -                   |
| Start    | 348                                    | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o1.tm              | Method  | TBLASTX:Maize       |
| Start    | 349                                    | End     | 996                 |
| GI       | none                                   | Score   | 678                 |
| Exons    | 349..993, 350..994, 350..991, 811..996 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775  | Strand  | -                   |
| Start    | 348  | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o2.tc  | Method  | TBLASTX:Cress       |
| Start    | 395  | End     | 7846                |
| GI       | none   | Score   | 44                  |
| Exons    | 395..991, 417..503, 527..829, 579..860, 921..992, 1283..1828, 1392..1745, 2028..2207, 2046..2204, 2319..2408, 2323..2412, 3444..3641, 3507..3602, 3681..3818, 3682..3834, 4171..4275, 4315..4638, 4387..4617, 4403..4630, 4968..5123, 5001..5099, 5184..5252, 5341..5409, 5343..5408, 5422..5511, 5858..5965, 5859..5951, 7142..7282, 7364..7432, 7577..7690, 7608..7691, 7790..7846 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775  | Strand  | -                   |
| Start    | 348  | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o4.ts  | Method  | TBLASTX:Soybean     |
| Start    | 395  | End     | 5114                |
| GI       | none   | Score   | 135                 |
| Exons    | 395..829, 527..787, 579..830, 1331..1828, 1392..1829, 3681..3818, 4165..4254, 4315..4638, 4384..4638, 4755..4841, 4974..5060, 5076..5114 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22466                                       | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775                                       | Strand  | -                   |
| Start    | 348   | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o1.ts                   | Method  | TBLASTX:Soybean     |
| Start    | 833   | End     | 1330                |
| GI       | none  | Score   | 207                 |
| Exons    | 833..1189, 833..1330, 915..1328, 1229..1330 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775  | Strand  | -                   |
| Start    | 348  | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o2.tm                      | Method  | TBLASTX:Maize       |
| Start    | 1280   | End     | 2090                |
| GI       | none   | Score   | 224                 |
| Exons    | 1280..1816, 1392..1745, 1601..1816, 2046..2090 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775  | Strand  | -                   |
| Start    | 348  | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o1.tw                                  | Method  | TBLASTX:Wheat       |
| Start    | 1616   | End     | 2207                |
| GI       | none   | Score   | 87                  |
| Exons    | 1616..1828, 1629..1736, 2046..2204, 2047..2163, 2061..2207 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775  | Strand  | -                   |
| Start    | 348  | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 2025   | End     | 3054                |
| GI       | none   | Score   | 124                 |
| Exons    | 2025..2207, 2043..2204, 2047..2208, 2059..2205, 2319..2474, 2323..2460, 3000..3053, 3001..3054 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775  | Strand  | -                   |
| Start    | 348  | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o3.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 2091   | End     | 2372                |
| GI       | none   | Score   | 161                 |
| Exons    | 2091..2207, 2091..2204, 2095..2205, 2319..2372, 2320..2370 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775  | Strand  | -                   |
| Start    | 348  | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o1.tc                      | Method  | TBLASTX:Cress       |
| Start    | 3030   | End     | 3441                |
| GI       | none   | Score   | 325                 |
| Exons    | 3030..3440, 3034..3366, 3036..3431, 3157..3441 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775  | Strand  | -                   |
| Start    | 348  | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o2.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 3171   | End     | 3537                |
| GI       | none   | Score   | 292                 |
| Exons    | 3171..3524, 3175..3525, 3205..3537, 3326..3529 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775  | Strand  | -                   |
| Start    | 348  | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o4.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 3295   | End     | 3728                |
| GI       | none   | Score   | 38                  |
| Exons    | 3295..3351, 3384..3641, 3427..3615, 3672..3716, 3681..3728 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22466  | Seq. ID | OJ990625_01.9921.C5 |
| Gene No. | 46775  | Strand  | -                   |
| Start    | 348  | End     | 7982                |
| Name     | OJ990625_01.9921.C5.o5.ts                                  | Method  | TBLASTX:Soybean     |
| Start    | 5064   | End     | 5430                |
| GI       | none   | Score   | 115                 |
| Exons    | 5064..5258, 5121..5258, 5143..5277, 5338..5430, 5342..5428 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22467   | Seq. ID | OJ990625_01.9921.C6 |
| Gene No.    | 46776   | Strand  | +                   |
| Start       | 153   | End     | 401                 |
| Name        | OJ990625_01.9921.C6.o1.gp   | Method  | AAT/GAP             |
| Start       | 153   | End     | 401                 |
| GI          | 42_1.R1084  | Score   | 469                 |
| Exons       | 153..401  |         |                     |
| GI Descrip. | '2252840 3.0e-09 (AF013293) contains regions of similarity to Haemophilus influenzae permease (SP:P38767) [Arabidopsis thaliana] >gi_6049882_gb_AAF02797.1_AF195115_17 (AF195115) contains regions of similarity to Haemophilus influenzae permease (SP:P38767) [Arabidopsis thaliana]' |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22468                                    | Seq. ID | OJ990625_01.9921.C9 |
| Gene No. | 46777                                    | Strand  |                     |
| Start    | 7  | End     | 170                 |
| Name     | OJ990625_01.9921.C9.o1.tm                | Method  | TBLASTX:Maize       |
| Start    | 7  | End     | 170                 |
| GI       | none                                     | Score   | 89                  |
| Exons    | 7..156, 8..109, 9..170, 10..147, 39..170 |         |                     |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22469  | Seq. ID | OJ990625_01.9921.C10 |
| Gene No.    | 46778  | Strand  | +                    |
| Start       | 4208   | End     | 5471                 |
| Name        | OJ990625_01.9921.C10.o1.gp   | Method  | AAT/GAP              |
| Start       | 4208   | End     | 5471                 |
| GI          | 21063_1.R1084  | Score   | 1038                 |
| Exons       | 4208..4364, 4730..4974, 5311..5471   |         |                      |
| GI Descrip. | '3098603 4.0e-74 (AF052191) katanin p60 subunit [Strongylocentrotus purpuratus]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22469  | Seq. ID | OJ990625_01.9921.C10 |
| Gene No. | 46779  | Strand  | +                    |
| Start    | 6541   | End     | 7166                 |
| Name     | OJ990625_01.9921.C10.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 274  | End     | 1594                 |
| GI       | none   | Score   | 187                  |
| Exons    | 274..432, 387..431, 1236..1406, 1237..1368, 1241..1405, 1376..1594, 1380..1592, 1525..1593 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22469  | Seq. ID | OJ990625_01.9921.C10 |
| Gene No. | 46779  | Strand  | +                    |
| Start    | 6541   | End     | 7166                 |
| Name     | OJ990625_01.9921.C10.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 331  | End     | 1596                 |
| GI       | none   | Score   | 162                  |
| Exons    | 331..432, 1236..1394, 1237..1365, 1401..1451, 1414..1452, 1444..1482, 1446..1493, 1521..1574, 1522..1596 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22469  | Seq. ID | OJ990625_01.9921.C10 |
| Gene No. | 46779  | Strand  | +                    |
| Start    | 6541   | End     | 7166                 |
| Name     | OJ990625_01.9921.C10.o3.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 4224   | End     | 5467                 |
| GI       | none   | Score   | 128                  |
| Exons    | 4224..4361, 4729..4974, 4730..4975, 5312..5389, 5414..5467 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22469                              | Seq. ID | OJ990625_01.9921.C10 |
| Gene No. | 46779                              | Strand  | +                    |
| Start    | 6541                               | End     | 7166                 |
| Name     | OJ990625_01.9921.C10.o2.tc         | Method  | TBLASTX:Cress        |
| Start    | 4269                               | End     | 4972                 |
| GI       | none                               | Score   | 76                   |
| Exons    | 4269..4361, 4733..4972, 4741..4953 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22469  | Seq. ID | OJ990625_01.9921.C10 |
| Gene No. | 46779  | Strand  | +                    |
| Start    | 6541   | End     | 7166                 |
| Name     | OJ990625_01.9921.C10.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4302   | End     | 5392                 |
| GI       | none   | Score   | 110                  |
| Exons    | 4302..4364, 4307..4369, 4308..4364, 4725..4964, 4726..4962, 4726..4974, 4727..4975, 4815..4979, 5304..5387, 5311..5391, 5312..5392 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22469                      | Seq. ID | OJ990625_01.9921.C10 |
| Gene No. | 46779                      | Strand  | +                    |
| Start    | 6541                       | End     | 7166                 |
| Name     | OJ990625_01.9921.C10.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 4748                       | End     | 4975                 |
| GI       | none                       | Score   | 212                  |
| Exons    | 4748..4975, 4765..4974     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22469  | Seq. ID | OJ990625_01.9921.C10 |
| Gene No. | 46779  | Strand  | +                    |
| Start    | 6541   | End     | 7166                 |
| Name     | OJ990625_01.9921.C10.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 6036   | End     | 6839                 |
| GI       | none   | Score   | 125                  |
| Exons    | 6036..6143, 6037..6132, 6054..6146, 6538..6696, 6542..6832, 6543..6839, 6547..6831 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22469   | Seq. ID | OJ990625_01.9921.C10 |
| Gene No.    | 46779   | Strand  | +                    |
| Start       | 6541  | End     | 7166                 |
| Name        | OJ990625_01.9921.C10.o2.gp                              | Method  | AAT/GAP              |
| Start       | 6541  | End     | 7166                 |
| GI          | 16329_1.R1084   | Score   | 1113                 |
| Exons       | 6541..7166  |         |                      |
| GI Descrip. | '3283072 3.0e-13 (AF056022) p60 katanin [Homo sapiens]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22469                      | Seq. ID | OJ990625_01.9921.C10 |
| Gene No. | 46779                      | Strand  | +                    |
| Start    | 6541                       | End     | 7166                 |
| Name     | OJ990625_01.9921.C10.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 6542                       | End     | 6664                 |
| GI       | none                       | Score   | 187                  |
| Exons    | 6542..6664, 6544..6663     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22469                      | Seq. ID | OJ990625_01.9921.C10 |
| Gene No. | 46779                      | Strand  | +                    |
| Start    | 6541                       | End     | 7166                 |
| Name     | OJ990625_01.9921.C10.o3.tc | Method  | TBLASTX:Cress        |

|       |  |       |      |
|-------|--|-------|------|
| Start | 6661   | End   | 6920 |
| GI    | none   | Score | 224  |
| Exons | 6661..6822, 6662..6826, 6671..6874, 6675..6920 |       |      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22470  | Seq. ID | OJ990625_01.9921.C12 |
| Gene No.    | 46780  | Strand  | +                    |
| Start       | 8257   | End     | 8337                 |
| Name        | OJ990625_01.9921.C12.o2.gp   | Method  | AAT/GAP              |
| Start       | 8257   | End     | 8337                 |
| GI          | 38012_1.R1084  | Score   | 101                  |
| Exons       | 8257..8337   |         |                      |
| GI Descrip. | '4097947/gb U72255 OSU72255 2.0e-23 Oryza sativa beta-1,3-glucanase precursor (Gns9) gene, complete cds' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22470                      | Seq. ID | OJ990625_01.9921.C12 |
| Gene No. | 46781                      | Strand  | -                    |
| Start    | 1                          | End     | 326                  |
| Name     | OJ990625_01.9921.C12.o1.gp | Method  | AAT/GAP              |
| Start    | 1                          | End     | 326                  |
| GI       | 286945                     | Score   | 616                  |
| Exons    | 1..326                     |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22471   | Seq. ID | OJ990625_01.9921.C13 |
| Gene No. | 46782   | Strand  |                      |
| Start    | 107   | End     | 2338                 |
| Name     | OJ990625_01.9921.C13.o2.tm  | Method  | TBLASTX:Maize        |
| Start    | 107   | End     | 2338                 |
| GI       | none  | Score   | 101                  |
| Exons    | 107..166, 110..172, 112..177, 339..443, 353..451, 356..445, 730..828, 734..829, 734..826, 909..989, 918..1001, 1510..1602, 1516..1605, 1517..1618, 1521..1622, 1708..1821, 1709..1822, 1711..1824, 2015..2071, 2025..2057, 2152..2211, 2153..2212, 2306..2338, 2307..2336 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22471  | Seq. ID | OJ990625_01.9921.C13 |
| Gene No. | 46783  | Strand  |                      |
| Start    | 3291   | End     | 5835                 |
| Name     | OJ990625_01.9921.C13.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 3291   | End     | 5835                 |
| GI       | none   | Score   | 96                   |
| Exons    | 3291..3413, 3311..3418, 3317..3412, 3324..3419, 3522..3620, 3527..3616, 3534..3620, 3759..4013, 3759..4013, 3760..4014, 3761..4015, 5075..5170, 5076..5171, 5739..5810, 5740..5835, 5741..5827 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22471  | Seq. ID | OJ990625_01.9921.C13 |
| Gene No. | 46783  | Strand  |                      |
| Start    | 3291   | End     | 5835                 |
| Name     | OJ990625_01.9921.C13.o2.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 3317   | End     | 3625                 |
| GI       | none   | Score   | 60                   |
| Exons    | 3317..3418, 3321..3419, 3527..3625, 3528..3620, 3530..3625 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22471                      | Seq. ID | OJ990625_01.9921.C13 |
| Gene No. | 46783                      | Strand  |                      |
| Start    | 3291                       | End     | 5835                 |
| Name     | OJ990625_01.9921.C13.o1.ts | Method  | TBLASTX:Soybean      |

|       |                                    |       |      |
|-------|------------------------------------|-------|------|
| Start | 3851                               | End   | 4025 |
| GI    | none                               | Score | 135  |
| Exons | 3851..4015, 3852..4013, 3852..4025 |       |      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22472   | Seq. ID | OJ990625_01.9921.C15 |
| Gene No.    | 46784   | Strand  | +                    |
| Start       | 705   | End     | 879                  |
| Name        | OJ990625_01.9921.C15.o1.gp  | Method  | AAT/GAP              |
| Start       | 705   | End     | 879                  |
| GI          | 15886_1.R1084   | Score   | 275                  |
| Exons       | 705..879  |         |                      |
| GI Descrip. | '287938/emb X54204 CVPRSET5C 6.0e-47 Cloning vector pRSET5c (pBluescript KS plus derivative)' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22473                      | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46785                      | Strand  | +                    |
| Start    | 10168                      | End     | 10609                |
| Name     | OJ990625_01.9921.C18.o3.gp | Method  | AAT/GAP              |
| Start    | 10168                      | End     | 10609                |
| GI       | none                       | Score   | 868                  |
| Exons    | 10168..10609               |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22473  | Seq. ID | OJ990625_01.9921.C18 |
| Gene No.    | 46786  | Strand  | -                    |
| Start       | 3177   | End     | 6006                 |
| Name        | OJ990625_01.9921.C18.o2.gp   | Method  | AAT/GAP              |
| Start       | 3177   | End     | 6006                 |
| GI          | 2400_1.R1084   | Score   | 2153                 |
| Exons       | 3177..3533, 4041..4091, 4180..4296, 4377..4451, 4538..4606, 4686..4717, 4880..4958, 5046..5087, 5181..5232, 5315..5394, 5748..6006 |         |                      |
| GI Descrip. | '287938/emb X54204 CVPRSET5C 6.0e-47 Cloning vector pRSET5c (pBluescript KS plus derivative)'                                      |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22473  | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787  | Strand  | -                    |
| Start    | 14973  | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 3232   | End     | 5880                 |
| GI       | none   | Score   | 49                   |
| Exons    | 3232..3297, 3273..3296, 3368..3535, 3396..3536, 3397..3534, 4038..4094, 4038..4097, 4039..4095, 4180..4299, 4181..4297, 4356..4412, 4377..4412, 4388..4453, 4410..4454, 4535..4606, 4536..4607, 4536..4607, 4686..4718, 4687..4728, 4872..5003, 4917..4964, 5023..5082, 5046..5090, 5051..5086, 5181..5234, 5181..5234, 5182..5235, 5313..5390, 5314..5394, 5314..5394, 5315..5395, 5745..5879, 5748..5852, 5749..5880 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22473   | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787   | Strand  | -                    |
| Start    | 14973   | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o2.ts  | Method  | TBLASTX:Soybean      |
| Start    | 3402  | End     | 6021                 |
| GI       | none  | Score   | 118                  |
| Exons    | 3402..3536, 3403..3534, 3417..3536, 4038..4097, 4039..4098, 4150..4284, 4172..4297, 4178..4282, 4180..4299, 4377..4451, 4377..4439, 4381..4452, 4417..4452, 4510..4596, 4535..4606, |         |                      |



4536..4607, 4536..4607, 4686..4718, 4687..4728, 4917..4964,  
 4918..4965, 5040..5090, 5047..5085, 5181..5234, 5188..5235,  
 5314..5394, 5315..5395, 5745..6014, 5749..6021

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22473  | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787  | Strand  | -                    |
| Start    | 14973  | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 4038   | End     | 6027                 |
| GI       | none   | Score   | 67                   |
| Exons    | 4038..4097, 4039..4092, 4178..4282, 4180..4299, 4190..4297,<br>4356..4451, 4377..4439, 4381..4452, 4382..4453, 4533..4613,<br>4535..4606, 4536..4607, 4686..4718, 4687..4728, 4881..4964,<br>4917..4964, 5046..5090, 5181..5234, 5188..5232, 5326..5394,<br>5330..5395, 5745..6014, 5749..6027 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22473                      | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787                      | Strand  | -                    |
| Start    | 14973                      | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o6.tm | Method  | TBLASTX:Maize        |
| Start    | 5881                       | End     | 6027                 |
| GI       | none                       | Score   | 163                  |
| Exons    | 5881..6027, 5883..6014     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22473  | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787  | Strand  | -                    |
| Start    | 14973  | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o3.ts                             | Method  | TBLASTX:Soybean      |
| Start    | 11717  | End     | 12124                |
| GI       | none   | Score   | 89                   |
| Exons    | 11717..11851, 11819..12124, 11873..11965, 11875..12123 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22473   | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787   | Strand  | -                    |
| Start    | 14973   | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 11971   | End     | 12457                |
| GI       | none  | Score   | 242                  |
| Exons    | 11971..12171, 11972..12181, 12193..12456, 12193..12456,<br>12194..12457 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22473  | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787  | Strand  | -                    |
| Start    | 14973  | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 12479  | End     | 14336                |
| GI       | none   | Score   | 164                  |
| Exons    | 12479..12589, 12479..12577, 12480..12593, 12665..12814,<br>12676..12834, 12677..12820, 12678..12833, 14174..14308,<br>14175..14300, 14175..14336, 14176..14325 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22473                      | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787                      | Strand  | -                    |
| Start    | 14973                      | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o5.tm | Method  | TBLASTX:Maize        |
| Start    | 14355                      | End     | 14638                |
| GI       | none                       | Score   | 104                  |

Exons 14355..14465, 14369..14467, 14460..14492, 14468..14491,  
14493..14636, 14495..14638, 14495..14638

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22473   | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787   | Strand  | -                    |
| Start    | 14973   | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 14463   | End     | 15020                |
| GI       | none  | Score   | 120                  |
| Exons    | 14463..14609, 14483..14608, 14625..14867, 14679..14774,<br>14835..14867, 14901..15020, 14901..15017 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22473                      | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787                      | Strand  | -                    |
| Start    | 14973                      | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 14897                      | End     | 15077                |
| GI       | none                       | Score   | 250                  |
| Exons    | 14897..15052, 14898..15077 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22473                      | Seq. ID | OJ990625_01.9921.C18 |
| Gene No. | 46787                      | Strand  | -                    |
| Start    | 14973                      | End     | 15354                |
| Name     | OJ990625_01.9921.C18.o4.gp | Method  | AAT/GAP              |
| Start    | 14973                      | End     | 15354                |
| GI       | none                       | Score   | 744                  |
| Exons    | 14973..15354               |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22474  | Seq. ID | OJ990625_01.9921.C22 |
| Gene No.    | 46788  | Strand  | +                    |
| Start       | 1  | End     | 1509                 |
| Name        | OJ990625_01.9921.C22.o1.gp   | Method  | AAT/GAP              |
| Start       | 1  | End     | 1509                 |
| GI          | 15886_1.R1084  | Score   | 1120                 |
| Exons       | 1..189, 1102..1509   |         |                      |
| GI Descrip. | '287938/emb X54204 CVPRSET5C 6.0e-47 Cloning vector pRSET5c<br>(pBluescript KS plus derivative)' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22474                      | Seq. ID | OJ990625_01.9921.C22 |
| Gene No. | 46788                      | Strand  | +                    |
| Start    | 1                          | End     | 1509                 |
| Name     | OJ990625_01.9921.C22.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 1                          | End     | 189                  |
| GI       | none                       | Score   | 251                  |
| Exons    | 1..189, 3..188             |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22474                      | Seq. ID | OJ990625_01.9921.C22 |
| Gene No. | 46788                      | Strand  | +                    |
| Start    | 1                          | End     | 1509                 |
| Name     | OJ990625_01.9921.C22.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 1                          | End     | 189                  |
| GI       | none                       | Score   | 222                  |
| Exons    | 1..189, 3..188             |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22474 | Seq. ID | OJ990625_01.9921.C22 |
| Gene No. | 46788 | Strand  | +                    |
| Start    | 1     | End     | 1509                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990625_01.9921.C22.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 1  | End     | 189                  |
| GI          | none   | Score   | 276                  |
| Exons       | 1..189, 3..188   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22475  | Seq. ID | OJ990625_01.9921.C26 |
| Gene No.    | 46789  | Strand  | -                    |
| Start       | 1217   | End     | 1919                 |
| Name        | OJ990625_01.9921.C26.o1.gp   | Method  | AAT/GAP              |
| Start       | 1217   | End     | 1919                 |
| GI          | none   | Score   | 1136                 |
| Exons       | 1217..1453, 1566..1919   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22475  | Seq. ID | OJ990625_01.9921.C26 |
| Gene No.    | 46790  | Strand  | -                    |
| Start       | 2068   | End     | 2879                 |
| Name        | OJ990625_01.9921.C26.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 1340   | End     | 1914                 |
| GI          | none   | Score   | 40                   |
| Exons       | 1340..1372, 1372..1407, 1373..1405, 1410..1454, 1410..1442, 1536..1733, 1572..1721, 1722..1784, 1723..1785, 1888..1914 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22475  | Seq. ID | OJ990625_01.9921.C26 |
| Gene No.    | 46790  | Strand  | -                    |
| Start       | 2068   | End     | 2879                 |
| Name        | OJ990625_01.9921.C26.o2.gp   | Method  | AAT/GAP              |
| Start       | 2068   | End     | 2879                 |
| GI          | uC-osrocyp036e02b1   | Score   | 847                  |
| Exons       | 2068..2196, 2342..2419, 2609..2879   |         |                      |
| GI Descrip. | '3540189 4.0e-17 (AC004122) Hypothetical protein [Arabidopsis thaliana]'   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22476  | Seq. ID | OJ990625_01.9921.C28 |
| Gene No.    | 46791  | Strand  |                      |
| Start       | 717  | End     | 2206                 |
| Name        | OJ990625_01.9921.C28.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 717  | End     | 2206                 |
| GI          | none   | Score   | 69                   |
| Exons       | 717..815, 724..813, 744..815, 1932..2030, 1933..2037, 1942..2040, 2080..2196, 2131..2202, 2132..2203, 2132..2206       |         |                      |
|             |  |         |                      |
| Seq. No.    | 22477  | Seq. ID | OJ990625_01.9921.C29 |
| Gene No.    | 46792  | Strand  | +                    |
| Start       | 4098   | End     | 6394                 |
| Name        | OJ990625_01.9921.C29.o2.gp   | Method  | AAT/GAP              |
| Start       | 4098   | End     | 6394                 |
| GI          | 701282   | Score   | 594                  |
| Exons       | 4098..4286, 6259..6394   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22478  | Seq. ID | OJ990625_01.9921.C30 |
| Gene No.    | 46793  | Strand  |                      |
| Start       | 35   | End     | 595                  |
| Name        | OJ990625_01.9921.C30.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 35   | End     | 595                  |
| GI          | none   | Score   | 124                  |
| Exons       | 35..151, 49..144, 215..349, 430..594, 431..595   |         |                      |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22479  | Seq. ID | OJ990625_03.9927.C5 |
| Gene No.    | 46794  | Strand  | +                   |
| Start       | 1  | End     | 708                 |
| Name        | OJ990625_03.9927.C5.ol.np                      | Method  | AAT/NAP             |
| Start       | 1  | End     | 708                 |
| GI          | 5091513  | Score   | 809                 |
| Exons       | 1..708   |         |                     |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22479                     | Seq. ID | OJ990625_03.9927.C5 |
| Gene No. | 46794                     | Strand  | +                   |
| Start    | 1                         | End     | 708                 |
| Name     | OJ990625_03.9927.C5.ol.gs | Method  | GENSCAN             |
| Start    | 42                        | End     | 347                 |
| GI       | none                      | Score   | .89                 |
| Exons    | 42..347                   |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22480  | Seq. ID | OJ990625_03.9927.C6 |
| Gene No. | 46795  | Strand  | -                   |
| Start    | 2496   | End     | 5096                |
| Name     | OJ990625_03.9927.C6.ol.tc                        | Method  | TBLASTX:Cress       |
| Start    | 376  | End     | 852                 |
| GI       | none   | Score   | 96                  |
| Exons    | 376..450, 546..626, 547..636, 718..846, 718..852 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22480  | Seq. ID | OJ990625_03.9927.C6 |
| Gene No. | 46795  | Strand  | -                   |
| Start    | 2496   | End     | 5096                |
| Name     | OJ990625_03.9927.C6.ol.tm  | Method  | TBLASTX:Maize       |
| Start    | 376  | End     | 846                 |
| GI       | none   | Score   | 108                 |
| Exons    | 376..450, 381..452, 381..449, 531..632, 537..629, 547..636, 547..642, 718..846, 718..840 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22480  | Seq. ID | OJ990625_03.9927.C6 |
| Gene No. | 46795  | Strand  | -                   |
| Start    | 2496   | End     | 5096                |
| Name     | OJ990625_03.9927.C6.ol.ts                                  | Method  | TBLASTX:Soybean     |
| Start    | 376  | End     | 846                 |
| GI       | none   | Score   | 114                 |
| Exons    | 376..450, 390..449, 546..626, 547..636, 718..846, 718..819 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22480  | Seq. ID | OJ990625_03.9927.C6 |
| Gene No.    | 46795  | Strand  | -                   |
| Start       | 2496   | End     | 5096                |
| Name        | OJ990625_03.9927.C6.ol.np                                  | Method  | AAT/NAP             |
| Start       | 2408   | End     | 5096                |
| GI          | 2244831  | Score   | 336                 |
| Exons       | 2408..2461, 3732..3863, 3900..4017, 4047..4431, 5006..5096 |         |                     |
| GI Descrip. | (Z97337) hypothetical protein [Arabidopsis thaliana]       |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22480                     | Seq. ID | OJ990625_03.9927.C6 |
| Gene No. | 46795                     | Strand  | -                   |
| Start    | 2496                      | End     | 5096                |
| Name     | OJ990625_03.9927.C6.ol.gs | Method  | GENSCAN             |
| Start    | 2496                      | End     | 4974                |
| GI       | none                      | Score   | .66                 |

Exons 2496..2607, 2703..2747, 3490..3524, 3740..3991, 4099..4155,  
4161..4479, 4823..4974

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22480                     | Seq. ID | OJ990625_03.9927.C6 |
| Gene No. | 46795                     | Strand  | -                   |
| Start    | 2496                      | End     | 5096                |
| Name     | OJ990625_03.9927.C6.o1.gp | Method  | AAT/GAP             |
| Start    | 3035                      | End     | 3430                |
| GI       | 569134                    | Score   | 788                 |
| Exons    | 3035..3430                |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22481  | Seq. ID | OJ990625_03.9927.C7 |
| Gene No. | 46796  | Strand  | -                   |
| Start    | 524  | End     | 793                 |
| Name     | OJ990625_03.9927.C7.o1.tw                        | Method  | TBLASTX:Wheat       |
| Start    | 524  | End     | 793                 |
| GI       | none   | Score   | 94                  |
| Exons    | 524..646, 532..645, 632..742, 651..731, 731..793 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22482                     | Seq. ID | OJ990625_03.9927.C8 |
| Gene No. | 46797                     | Strand  | -                   |
| Start    | 30                        | End     | 440                 |
| Name     | OJ990625_03.9927.C8.o1.gs | Method  | GENSCAN             |
| Start    | 30                        | End     | 440                 |
| GI       | none                      | Score   | .66                 |
| Exons    | 30..228, 295..440         |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22483  | Seq. ID | OJ990625_03.9927.C9 |
| Gene No. | 46798  | Strand  | -                   |
| Start    | 986  | End     | 6189                |
| Name     | OJ990625_03.9927.C9.o1.gs  | Method  | GENSCAN             |
| Start    | 986  | End     | 6189                |
| GI       | none   | Score   | .43                 |
| Exons    | 986..1116, 1439..1564, 2090..2178, 3941..4162, 4233..4386,<br>5013..5082, 6085..6189 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22483   | Seq. ID | OJ990625_03.9927.C9 |
| Gene No. | 46799   | Strand  | -                   |
| Start    | 8556  | End     | 17321               |
| Name     | OJ990625_03.9927.C9.o2.gs   | Method  | GENSCAN             |
| Start    | 8556  | End     | 17321               |
| GI       | none  | Score   | .73                 |
| Exons    | 8556..8677, 8688..8915, 8994..9358, 9430..9638, 13399..13582,<br>14163..14253, 14301..14375, 16562..16675, 17315..17321 |         |                     |

|          |                                 |         |                      |
|----------|---------------------------------|---------|----------------------|
| Seq. No. | 22484                           | Seq. ID | OJ990625_03.9927.C10 |
| Gene No. | 46800                           | Strand  | -                    |
| Start    | 168                             | End     | 1563                 |
| Name     | OJ990625_03.9927.C10.o1.gs      | Method  | GENSCAN              |
| Start    | 168                             | End     | 1563                 |
| GI       | none                            | Score   | .67                  |
| Exons    | 168..376, 914..1044, 1511..1563 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22485                      | Seq. ID | OJ990625_03.9927.C11 |
| Gene No. | 46801                      | Strand  | -                    |
| Start    | 1415                       | End     | 1886                 |
| Name     | OJ990625_03.9927.C11.o1.gs | Method  | GENSCAN              |

Start 1415  
 GI none  
 Exons 1415..1509, 1760..1886

End 1886  
 Score .86

Seq. No. 22486  
 Gene No. 46802  
 Start 12125  
 Name OJ990625\_03.9927.C12.o2.gp  
 Start 12125  
 GI 25465\_1.R1084  
 Exons 12125..12360, 12923..13160  
 GI Descrip. '1420932/gb|U61383|ORU61383 7.0e-21 Oryza rufipogon  
 4-coumarate-CoA ligase gene, intron 1, partial sequence'

Seq. ID OJ990625\_03.9927.C12  
 Strand +  
 End 13160  
 Method AAT/GAP  
 End 13160  
 Score 841

Seq. No. 22486  
 Gene No. 46803  
 Start 25821  
 Name OJ990625\_03.9927.C12.o4.gs  
 Start 25821  
 GI none  
 Exons 25821..25883, 26066..26224, 26365..26504, 26720..26792

Seq. ID OJ990625\_03.9927.C12  
 Strand +  
 End 26792  
 Method GENSCAN  
 End 26792  
 Score .52

Seq. No. 22486  
 Gene No. 46804  
 Start 27589  
 Name OJ990625\_03.9927.C12.o5.gs  
 Start 27589  
 GI none  
 Exons 27589..27675, 29078..29290, 29370..30305, 30391..30538, 30647..31254

Seq. ID OJ990625\_03.9927.C12  
 Strand +  
 End 31254  
 Method GENSCAN  
 End 31254  
 Score .57

Seq. No. 22486  
 Gene No. 46805  
 Start 1  
 Name OJ990625\_03.9927.C12.o1.np  
 Start 1  
 GI 6539588  
 Exons 1..253, 944..970  
 GI Descrip. (AP000837) hypothetical protein [Oryza sativa]

Seq. ID OJ990625\_03.9927.C12  
 Strand -  
 End 8500  
 Method AAT/NAP  
 End 970  
 Score 228

Seq. No. 22486  
 Gene No. 46805  
 Start 1  
 Name OJ990625\_03.9927.C12.o1.gs  
 Start 8  
 GI none  
 Exons 8..253, 490..669, 1160..1237, 2287..2473, 3514..3600, 5004..6388, 6526..6719, 7425..7527, 8494..8500

Seq. ID OJ990625\_03.9927.C12  
 Strand -  
 End 8500  
 Method GENSCAN  
 End 8500  
 Score .46

Seq. No. 22486  
 Gene No. 46805  
 Start 1  
 Name OJ990625\_03.9927.C12.o2.np  
 Start 2313  
 GI 3687239  
 Exons 2313..2416, 3514..3622, 4711..4744  
 GI Descrip. (AC005169) putative clathrin assembly protein [Arabidopsis

Seq. ID OJ990625\_03.9927.C12  
 Strand -  
 End 8500  
 Method AAT/NAP  
 End 4744  
 Score 92

thaliana]

|             |                                     |         |                      |
|-------------|-------------------------------------|---------|----------------------|
| Seq. No.    | 22486                               | Seq. ID | OJ990625_03.9927.C12 |
| Gene No.    | 46805                               | Strand  | -                    |
| Start       | 1                                   | End     | 8500                 |
| Name        | OJ990625_03.9927.C12.o3.np          | Method  | AAT/NAP              |
| Start       | 4980                                | End     | 5555                 |
| GI          | 5852173                             | Score   | 355                  |
| Exons       | 4980..5555                          |         |                      |
| GI Descrip. | (AL117265) zhb0003.1 [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22486                      | Seq. ID | OJ990625_03.9927.C12 |
| Gene No. | 46805                      | Strand  | -                    |
| Start    | 1                          | End     | 8500                 |
| Name     | OJ990625_03.9927.C12.o1.gp | Method  | AAT/GAP              |
| Start    | 6355                       | End     | 6699                 |
| GI       | 2442632                    | Score   | 372                  |
| Exons    | 6355..6388, 6526..6699     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22486  | Seq. ID | OJ990625_03.9927.C12 |
| Gene No. | 46806  | Strand  | -                    |
| Start    | 11915  | End     | 18756                |
| Name     | OJ990625_03.9927.C12.o2.gs   | Method  | GENSCAN              |
| Start    | 11915  | End     | 18756                |
| GI       | none   | Score   | .62                  |
| Exons    | 11915..12067, 12252..12395, 12435..12542, 12877..12980,<br>13312..13441, 14226..14903, 16126..16220, 16434..16524,<br>17853..18331, 18389..18574, 18750..18756 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22486  | Seq. ID | OJ990625_03.9927.C12 |
| Gene No. | 46807  | Strand  | -                    |
| Start    | 19079  | End     | 24989                |
| Name     | OJ990625_03.9927.C12.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 3474   | End     | 24961                |
| GI       | none   | Score   | 126                  |
| Exons    | 3474..3599, 3514..3603, 3515..3604, 23373..23504, 23384..23551,<br>23410..23550, 23650..23721, 23651..23719, 23652..23735,<br>24486..24575, 24487..24576, 24788..24961, 24789..24929 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22486  | Seq. ID | OJ990625_03.9927.C12 |
| Gene No. | 46807  | Strand  | -                    |
| Start    | 19079  | End     | 24989                |
| Name     | OJ990625_03.9927.C12.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 3514   | End     | 24935                |
| GI       | none   | Score   | 102                  |
| Exons    | 3514..3603, 3515..3604, 23379..23504, 23425..23550,<br>23429..23551, 23461..23595, 23650..23721, 23651..23719,<br>24486..24575, 24487..24576, 24788..24928, 24789..24935 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22486   | Seq. ID | OJ990625_03.9927.C12 |
| Gene No. | 46807   | Strand  | -                    |
| Start    | 19079   | End     | 24989                |
| Name     | OJ990625_03.9927.C12.o2.ts  | Method  | TBLASTX:Soybean      |
| Start    | 3514  | End     | 24929                |
| GI       | none  | Score   | 112                  |
| Exons    | 3514..3603, 3515..3604, 24486..24575, 24487..24576,<br>24788..24928, 24789..24929 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22486  | Seq. ID | OJ990625_03.9927.C12 |
| Gene No. | 46807  | Strand  | -                    |
| Start    | 19079  | End     | 24989                |
| Name     | OJ990625_03.9927.C12.o3.gs   | Method  | GENSCAN              |
| Start    | 19079  | End     | 24928                |
| GI       | none   | Score   | .52                  |
| Exons    | 19079..19256, 20289..20338, 23518..23718, 24486..24572, 24635..24928 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22486   | Seq. ID | OJ990625_03.9927.C12 |
| Gene No.    | 46807   | Strand  | -                    |
| Start       | 19079   | End     | 24989                |
| Name        | OJ990625_03.9927.C12.o3.gp  | Method  | AAT/GAP              |
| Start       | 23149   | End     | 23551                |
| GI          | 20850_1.R1084   | Score   | 690                  |
| Exons       | 23149..23551  |         |                      |
| GI Descrip. | '3687239 3.0e-18 (AC005169) putative clathrin coat assembly protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22486  | Seq. ID | OJ990625_03.9927.C12 |
| Gene No. | 46807  | Strand  | -                    |
| Start    | 19079  | End     | 24989                |
| Name     | OJ990625_03.9927.C12.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 23294  | End     | 23721                |
| GI       | none   | Score   | 213                  |
| Exons    | 23294..23335, 23416..23550, 23417..23551, 23420..23551, 23424..23597, 23650..23721, 23651..23719 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22486  | Seq. ID | OJ990625_03.9927.C12 |
| Gene No. | 46807  | Strand  | -                    |
| Start    | 19079  | End     | 24989                |
| Name     | OJ990625_03.9927.C12.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 23413  | End     | 23728                |
| GI       | none   | Score   | 117                  |
| Exons    | 23413..23541, 23416..23547, 23417..23548, 23417..23548, 23650..23727, 23650..23721, 23651..23728 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22486  | Seq. ID | OJ990625_03.9927.C12 |
| Gene No.    | 46807  | Strand  | -                    |
| Start       | 19079  | End     | 24989                |
| Name        | OJ990625_03.9927.C12.o4.np   | Method  | AAT/NAP              |
| Start       | 23419  | End     | 24928                |
| GI          | 3687239  | Score   | 578                  |
| Exons       | 23419..23550, 23650..23718, 24486..24572, 24788..24928               |         |                      |
| GI Descrip. | (AC005169) putative clathrin assembly protein [Arabidopsis thaliana] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22486   | Seq. ID | OJ990625_03.9927.C12 |
| Gene No.    | 46807   | Strand  | -                    |
| Start       | 19079   | End     | 24989                |
| Name        | OJ990625_03.9927.C12.o4.gp  | Method  | AAT/GAP              |
| Start       | 23672   | End     | 24989                |
| GI          | 2280898   | Score   | 525                  |
| Exons       | 23672..23718, 24486..24572, 24788..24989  |         |                      |
| GI Descrip. | 3687239 1.0e-13 (AC005169) putative clathrin coat assembly protein [Arabidopsis thaliana] |         |                      |



|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22486  | Seq. ID | OJ990625_03.9927.C12 |
| Gene No.    | 46808  | Strand  |                      |
| Start       | 32066  | End     | 32485                |
| Name        | OJ990625_03.9927.C12.o1.tw   | Method  | TBLASTX:Wheat        |
| Start       | 32066  | End     | 32485                |
| GI          | none   | Score   | 330                  |
| Exons       | 32066..32485, 32077..32376   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No.    | 46809  | Strand  | +                    |
| Start       | 2292   | End     | 2403                 |
| Name        | OJ990625_03.9927.C13.o1.gp   | Method  | AAT/GAP              |
| Start       | 2292   | End     | 2403                 |
| GI          | uC-osflcyp088b12b1   | Score   | 156                  |
| Exons       | 2292..2403   |         |                      |
| GI Descrip. | '5257255/dbj AP000364.1 AP000364 3.0e-36 Oryza sativa genomic DNA, chromosome 8, clone:P0026F07' |         |                      |
|             |  |         |                      |
| Seq. No.    | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No.    | 46810  | Strand  | +                    |
| Start       | 4901   | End     | 8156                 |
| Name        | OJ990625_03.9927.C13.o2.gs   | Method  | GENSCAN              |
| Start       | 4901   | End     | 8132                 |
| GI          | none   | Score   | .48                  |
| Exons       | 4901..5249, 5641..5777, 6117..6422, 6672..7588, 7814..8132                                       |         |                      |
|             |  |         |                      |
| Seq. No.    | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No.    | 46810  | Strand  | +                    |
| Start       | 4901   | End     | 8156                 |
| Name        | OJ990625_03.9927.C13.o3.np   | Method  | AAT/NAP              |
| Start       | 4912   | End     | 8156                 |
| GI          | 4680203  | Score   | 1889                 |
| Exons       | 4912..6555, 6715..6944, 7221..8156   |         |                      |
| GI Descrip. | (AF114171) TNP2-like protein [Sorghum bicolor]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No.    | 46811  | Strand  | -                    |
| Start       | 1  | End     | 6386                 |
| Name        | OJ990625_03.9927.C13.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 4689                 |
| GI          | 2909637  | Score   | 136                  |
| Exons       | 1..831, 4650..4689   |         |                      |
| GI Descrip. | (AL021942) PE_PGRS [Mycobacterium tuberculosis]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No.    | 46811  | Strand  | -                    |
| Start       | 1  | End     | 6386                 |
| Name        | OJ990625_03.9927.C13.o2.np   | Method  | AAT/NAP              |
| Start       | 1575   | End     | 5625                 |
| GI          | 4680183  | Score   | 106                  |
| Exons       | 1575..1777, 5601..5625   |         |                      |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No.    | 46811  | Strand  | -                    |
| Start       | 1  | End     | 6386                 |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Name     | OJ990625_03.9927.C13.o3.tm                     | Method  | TBLASTX:Maize        |
| Start    | 2854   | End     | 3252                 |
| GI       | none   | Score   | 60                   |
| Exons    | 2854..2937, 2923..3252, 2923..3051, 3100..3234 |         |                      |
|          |  |         |                      |
| Seq. No. | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46811  | Strand  | -                    |
| Start    | 1  | End     | 6386                 |
| Name     | OJ990625_03.9927.C13.o3.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 5358   | End     | 5806                 |
| GI       | none   | Score   | 178                  |
| Exons    | 5358..5669, 5682..5789, 5705..5806             |         |                      |
|          |  |         |                      |
| Seq. No. | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46811  | Strand  | -                    |
| Start    | 1  | End     | 6386                 |
| Name     | OJ990625_03.9927.C13.o1.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 5378   | End     | 5662                 |
| GI       | none   | Score   | 316                  |
| Exons    | 5378..5662, 5379..5660                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46811  | Strand  | -                    |
| Start    | 1  | End     | 6386                 |
| Name     | OJ990625_03.9927.C13.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 5679   | End     | 6029                 |
| GI       | none   | Score   | 292                  |
| Exons    | 5679..6029, 5687..5836, 5876..6028             |         |                      |
|          |  |         |                      |
| Seq. No. | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46811  | Strand  | -                    |
| Start    | 1  | End     | 6386                 |
| Name     | OJ990625_03.9927.C13.o4.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 5679   | End     | 5948                 |
| GI       | none   | Score   | 221                  |
| Exons    | 5679..5948, 5693..5947                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46811  | Strand  | -                    |
| Start    | 1  | End     | 6386                 |
| Name     | OJ990625_03.9927.C13.o2.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 5816   | End     | 6130                 |
| GI       | none   | Score   | 338                  |
| Exons    | 5816..6088, 5817..6104, 5834..6130             |         |                      |
|          |  |         |                      |
| Seq. No. | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46811  | Strand  | -                    |
| Start    | 1  | End     | 6386                 |
| Name     | OJ990625_03.9927.C13.o1.tm                     | Method  | TBLASTX:Maize        |
| Start    | 5873   | End     | 6317                 |
| GI       | none   | Score   | 215                  |
| Exons    | 5873..6100, 5874..6107, 6122..6316, 6123..6317 |         |                      |
|          |  |         |                      |
| Seq. No. | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46811  | Strand  | -                    |
| Start    | 1  | End     | 6386                 |
| Name     | OJ990625_03.9927.C13.o2.ts                     | Method  | TBLASTX:Soybean      |

|       |                                    |       |      |
|-------|------------------------------------|-------|------|
| Start | 6152                               | End   | 6386 |
| GI    | none                               | Score | 224  |
| Exons | 6152..6307, 6153..6386, 6177..6377 |       |      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46812  | Strand  |                      |
| Start    | 6498   | End     | 6812                 |
| Name     | OJ990625_03.9927.C13.o4.tw   | Method  | TBLASTX:Wheat        |
| Start    | 6498   | End     | 6812                 |
| GI       | none   | Score   | 133                  |
| Exons    | 6498..6617, 6498..6587, 6499..6606, 6512..6610, 6618..6701, 6629..6670, 6728..6805, 6729..6812 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22487                      | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46812                      | Strand  |                      |
| Start    | 6498                       | End     | 6812                 |
| Name     | OJ990625_03.9927.C13.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 6501                       | End     | 6692                 |
| GI       | none                       | Score   | 198                  |
| Exons    | 6501..6692, 6542..6691     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22487                              | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46813                              | Strand  |                      |
| Start    | 6804                               | End     | 8078                 |
| Name     | OJ990625_03.9927.C13.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 6804                               | End     | 7184                 |
| GI       | none                               | Score   | 48                   |
| Exons    | 6804..6857, 6869..7165, 6870..7184 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46813  | Strand  |                      |
| Start    | 6804   | End     | 8078                 |
| Name     | OJ990625_03.9927.C13.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 6828   | End     | 8078                 |
| GI       | none   | Score   | 496                  |
| Exons    | 6828..7373, 6872..7360, 7368..7550, 7409..7453, 7574..7714, 7581..7745, 7725..7781, 7725..7781, 7782..7835, 7787..7819, 7853..7945, 7854..7958, 7959..8078 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22487  | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46813  | Strand  |                      |
| Start    | 6804   | End     | 8078                 |
| Name     | OJ990625_03.9927.C13.o2.tc                     | Method  | TBLASTX:Cress        |
| Start    | 7115   | End     | 7541                 |
| GI       | none   | Score   | 216                  |
| Exons    | 7115..7360, 7119..7373, 7368..7541, 7409..7537 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22487                      | Seq. ID | OJ990625_03.9927.C13 |
| Gene No. | 46813                      | Strand  |                      |
| Start    | 6804                       | End     | 8078                 |
| Name     | OJ990625_03.9927.C13.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 7767                       | End     | 8015                 |
| GI       | none                       | Score   | 223                  |
| Exons    | 7767..8015, 7769..7948     |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22488 | Seq. ID | OJ990625_03.9927.C14 |
| Gene No. | 46814 | Strand  | +                    |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 1  | End    | 2654    |
| Name        | OJ990625_03.9927.C14.o1.np                             | Method | AAT/NAP |
| Start       | 1  | End    | 2654    |
| GI          | 5430752  | Score  | 155     |
| Exons       | 1..406, 563..756, 2512..2654                           |        |         |
| GI Descrip. | (AC007504) Hypothetical Protein [Arabidopsis thaliana] |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22489  | Seq. ID | OJ990625_03.9927.C15 |
| Gene No. | 46815  | Strand  | +                    |
| Start    | 115  | End     | 3788                 |
| Name     | OJ990625_03.9927.C15.o1.gs   | Method  | GENSCAN              |
| Start    | 115  | End     | 3788                 |
| GI       | none   | Score   | .55                  |
| Exons    | 115..247, 397..491, 689..928, 1043..1123, 1179..1207, 1326..1496, 3704..3788 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22489                      | Seq. ID | OJ990625_03.9927.C15 |
| Gene No. | 46816                      | Strand  | +                    |
| Start    | 7486                       | End     | 8507                 |
| Name     | OJ990625_03.9927.C15.o3.gs | Method  | GENSCAN              |
| Start    | 7486                       | End     | 8435                 |
| GI       | none                       | Score   | .89                  |
| Exons    | 7486..7597, 7790..8435     |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22489   | Seq. ID | OJ990625_03.9927.C15 |
| Gene No.    | 46816   | Strand  | +                    |
| Start       | 7486  | End     | 8507                 |
| Name        | OJ990625_03.9927.C15.o1.np  | Method  | AAT/NAP              |
| Start       | 7739  | End     | 8507                 |
| GI          | 5734709   | Score   | 152                  |
| Exons       | 7739..8507  |         |                      |
| GI Descrip. | (AC008075) Contains PF 00069 Eukaryotic protein kinase domain. [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22490  | Seq. ID | OJ990625_03.9927.C16 |
| Gene No. | 46817  | Strand  | +                    |
| Start    | 140  | End     | 11973                |
| Name     | OJ990625_03.9927.C16.o1.gs   | Method  | GENSCAN              |
| Start    | 140  | End     | 11973                |
| GI       | none   | Score   | .43                  |
| Exons    | 140..355, 583..666, 2903..3107, 9758..9855, 11281..11401, 11723..11973 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22490                              | Seq. ID | OJ990625_03.9927.C16 |
| Gene No. | 46817                              | Strand  | +                    |
| Start    | 140                                | End     | 11973                |
| Name     | OJ990625_03.9927.C16.o1.tm         | Method  | TBLASTX:Maize        |
| Start    | 4489                               | End     | 4847                 |
| GI       | none                               | Score   | 85                   |
| Exons    | 4489..4779, 4496..4771, 4779..4847 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22490                      | Seq. ID | OJ990625_03.9927.C16 |
| Gene No. | 46817                      | Strand  | +                    |
| Start    | 140                        | End     | 11973                |
| Name     | OJ990625_03.9927.C16.o1.np | Method  | AAT/NAP              |
| Start    | 11696                      | End     | 11952                |
| GI       | 6539588                    | Score   | 102                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Exons       | 11696..11952  |         |                      |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa]        |         |                      |
| Seq. No.    | 22491   | Seq. ID | OJ990625_03.9927.C17 |
| Gene No.    | 46818   | Strand  | +                    |
| Start       | 70  | End     | 1885                 |
| Name        | OJ990625_03.9927.C17.o1.gs                            | Method  | GENSCAN              |
| Start       | 70  | End     | 1885                 |
| GI          | none  | Score   | .58                  |
| Exons       | 70..181, 1767..1885                                   |         |                      |
| Seq. No.    | 22491   | Seq. ID | OJ990625_03.9927.C17 |
| Gene No.    | 46819   | Strand  | +                    |
| Start       | 6069  | End     | 6504                 |
| Name        | OJ990625_03.9927.C17.o3.gs                            | Method  | GENSCAN              |
| Start       | 6069  | End     | 6504                 |
| GI          | none  | Score   | .41                  |
| Exons       | 6069..6289, 6336..6504                                |         |                      |
| Seq. No.    | 22491   | Seq. ID | OJ990625_03.9927.C17 |
| Gene No.    | 46820   | Strand  | -                    |
| Start       | 1038  | End     | 6643                 |
| Name        | OJ990625_03.9927.C17.o1.np                            | Method  | AAT/NAP              |
| Start       | 1038  | End     | 6643                 |
| GI          | 5091513   | Score   | 675                  |
| Exons       | 1038..1054, 4313..4772, 4928..5080, 6017..6643        |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa]        |         |                      |
| Seq. No.    | 22492   | Seq. ID | OJ990625_03.9927.C18 |
| Gene No.    | 46821   | Strand  | -                    |
| Start       | 1   | End     | 1213                 |
| Name        | OJ990625_03.9927.C18.o1.np                            | Method  | AAT/NAP              |
| Start       | 1   | End     | 1213                 |
| GI          | 5091513   | Score   | 1245                 |
| Exons       | 1..1213   |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa]        |         |                      |
| Seq. No.    | 22492   | Seq. ID | OJ990625_03.9927.C18 |
| Gene No.    | 46821   | Strand  | -                    |
| Start       | 1   | End     | 1213                 |
| Name        | OJ990625_03.9927.C18.o1.gs                            | Method  | GENSCAN              |
| Start       | 72  | End     | 984                  |
| GI          | none  | Score   | .98                  |
| Exons       | 72..761, 763..984                                     |         |                      |
| Seq. No.    | 22493   | Seq. ID | OJ990625_03.9927.C19 |
| Gene No.    | 46822   | Strand  | -                    |
| Start       | 1   | End     | 4457                 |
| Name        | OJ990625_03.9927.C19.o1.np                            | Method  | AAT/NAP              |
| Start       | 1   | End     | 4457                 |
| GI          | 5091513   | Score   | 391                  |
| Exons       | 1..220, 955..1278, 1348..1454, 2127..2220, 4437..4457 |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa]        |         |                      |
| Seq. No.    | 22493   | Seq. ID | OJ990625_03.9927.C19 |
| Gene No.    | 46822   | Strand  | -                    |
| Start       | 1   | End     | 4457                 |

Name OJ990625\_03.9927.C19.o1.gs Method GENSCAN  
 Start 115 End 3512  
 GI none Score .45  
 Exons 115..293, 649..707, 1015..1191, 1827..2221, 2464..2524,  
 3465..3512

Seq. No. 22493 Seq. ID OJ990625\_03.9927.C19  
 Gene No. 46822 Strand -  
 Start 1 End 4457  
 Name OJ990625\_03.9927.C19.o2.np Method AAT/NAP  
 Start 1739 End 3145  
 GI 4193320 Score 26  
 Exons 1739..1910, 3098..3145  
 GI Descrip. (AF045473) histone deacetylase [Zea mays]

Seq. No. 22493 Seq. ID OJ990625\_03.9927.C19  
 Gene No. 46822 Strand -  
 Start 1 End 4457  
 Name OJ990625\_03.9927.C19.o1.gp Method AAT/GAP  
 Start 2611 End 2917  
 GI 72524\_1.R1084 Score 392  
 Exons 2611..2917  
 GI Descrip. '5091496/dbj|AB023482.2|AB023482 3.0e-84 Oryza sativa genomic  
 DNA, chromosome 6, clone P0680A03, complete sequence'

Seq. No. 22494 Seq. ID OJ990625\_03.9927.C20  
 Gene No. 46823 Strand -  
 Start 2476 End 11466  
 Name OJ990625\_03.9927.C20.o1.gs Method GENSCAN  
 Start 2476 End 9898  
 GI none Score .43  
 Exons 2476..3113, 3684..3772, 4176..4248, 4541..5560, 5600..5896,  
 5936..6503, 6588..6869, 6889..7003, 8665..8725, 8920..9384,  
 9832..9898

Seq. No. 22494 Seq. ID OJ990625\_03.9927.C20  
 Gene No. 46823 Strand -  
 Start 2476 End 11466  
 Name OJ990625\_03.9927.C20.o1.np Method AAT/NAP  
 Start 4713 End 7973  
 GI 4325357 Score 428  
 Exons 4713..5286, 6091..6711, 7948..7973  
 GI Descrip. (AF128395) contains similarity to Arabidopsis thaliana  
 retrotransposon Athila hypothetical protein 1 (GB:X81801)  
 [Arabidopsis thaliana]

Seq. No. 22494 Seq. ID OJ990625\_03.9927.C20  
 Gene No. 46823 Strand -  
 Start 2476 End 11466  
 Name OJ990625\_03.9927.C20.o2.np Method AAT/NAP  
 Start 7926 End 11383  
 GI 6721502 Score 189  
 Exons 7926..8044, 11049..11383  
 GI Descrip. (AP001072) Similar to chromaffin granule ATPase II homolog.  
 (U75321) [Oryza sativa]

Seq. No. 22494 Seq. ID OJ990625\_03.9927.C20

Gene No. 46823  
 Start 2476  
 Name OJ990625\_03.9927.C20.o2.gs  
 Start 10744  
 GI none  
 Exons 10744..11466

Strand -  
 End 11466  
 Method GENSCAN  
 End 11466  
 Score .99

Seq. No. 22494  
 Gene No. 46824  
 Start 12808  
 Name OJ990625\_03.9927.C20.o2.tw  
 Start 5052  
 GI none  
 Exons 5052..5231, 5053..5166, 5280..5423

Seq. ID OJ990625\_03.9927.C20  
 Strand -  
 End 13099  
 Method TBLASTX:Wheat  
 End 5423  
 Score 69

Seq. No. 22494  
 Gene No. 46824  
 Start 12808  
 Name OJ990625\_03.9927.C20.o1.tc  
 Start 6195  
 GI none  
 Exons 6195..6503

Seq. ID OJ990625\_03.9927.C20  
 Strand -  
 End 13099  
 Method TBLASTX:Cress  
 End 6503  
 Score 189

Seq. No. 22494  
 Gene No. 46824  
 Start 12808  
 Name OJ990625\_03.9927.C20.o1.tw  
 Start 6222  
 GI none  
 Exons 6222..6329, 6303..6515, 6534..6650

Seq. ID OJ990625\_03.9927.C20  
 Strand -  
 End 13099  
 Method TBLASTX:Wheat  
 End 6650  
 Score 102

Seq. No. 22494  
 Gene No. 46824  
 Start 12808  
 Name OJ990625\_03.9927.C20.o2.gp  
 Start 12808  
 GI LIB3432-022-P1-K1-C11  
 Exons 12808..13099

Seq. ID OJ990625\_03.9927.C20  
 Strand -  
 End 13099  
 Method AAT/GAP  
 End 13099  
 Score 515

GI Descrip. '6041757/gb|AC011806.1|AC011806 0.0e+00 Genomic Sequence For  
 Oryza sativa Clone 10P20, Lemont Strain, Complete Sequence,  
 complete sequence'

Seq. No. 22495  
 Gene No. 46825  
 Start 1  
 Name OJ990325\_09.9921.C1.o1.np  
 Start 1  
 GI 4680179  
 Exons 1..660  
 GI Descrip. (AF111709) polyprotein [Oryza sativa subsp. indica]

Seq. ID OJ990325\_09.9921.C1  
 Strand +  
 End 660  
 Method AAT/NAP  
 End 660  
 Score 528

Seq. No. 22495  
 Gene No. 46825  
 Start 1  
 Name OJ990325\_09.9921.C1.o1.gs  
 Start 144  
 GI none

Seq. ID OJ990325\_09.9921.C1  
 Strand +  
 End 660  
 Method GENSCAN  
 End 623  
 Score .58

Exons 144..623

|          |                              |         |                     |
|----------|------------------------------|---------|---------------------|
| Seq. No. | 22495                        | Seq. ID | OJ990325_09.9921.C1 |
| Gene No. | 46825                        | Strand  | +                   |
| Start    | 1                            | End     | 660                 |
| Name     | OJ990325_09.9921.C1.o1.tw    | Method  | TBLASTX:Wheat       |
| Start    | 184                          | End     | 542                 |
| GI       | none                         | Score   | 50                  |
| Exons    | 184..360, 191..385, 192..542 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22495                     | Seq. ID | OJ990325_09.9921.C1 |
| Gene No. | 46825                     | Strand  | +                   |
| Start    | 1                         | End     | 660                 |
| Name     | OJ990325_09.9921.C1.o1.tm | Method  | TBLASTX:Maize       |
| Start    | 192                       | End     | 497                 |
| GI       | none                      | Score   | 232                 |
| Exons    | 192..497, 206..322        |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22496                                      | Seq. ID | OJ990325_09.9921.C2 |
| Gene No.    | 46826                                      | Strand  | +                   |
| Start       | 1  | End     | 670                 |
| Name        | OJ990325_09.9921.C2.o1.np                  | Method  | AAT/NAP             |
| Start       | 1  | End     | 607                 |
| GI          | 4512242                                    | Score   | 1046                |
| Exons       | 1..607                                     |         |                     |
| GI Descrip. | (AB014750) polyprotein [Nicotiana tabacum] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22496                     | Seq. ID | OJ990325_09.9921.C2 |
| Gene No. | 46826                     | Strand  | +                   |
| Start    | 1                         | End     | 670                 |
| Name     | OJ990325_09.9921.C2.o1.ts | Method  | TBLASTX:Soybean     |
| Start    | 2                         | End     | 172                 |
| GI       | none                      | Score   | 211                 |
| Exons    | 2..172, 40..171           |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22496                     | Seq. ID | OJ990325_09.9921.C2 |
| Gene No. | 46826                     | Strand  | +                   |
| Start    | 1                         | End     | 670                 |
| Name     | OJ990325_09.9921.C2.o2.tw | Method  | TBLASTX:Wheat       |
| Start    | 2                         | End     | 187                 |
| GI       | none                      | Score   | 231                 |
| Exons    | 2..187, 49..171           |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22496                     | Seq. ID | OJ990325_09.9921.C2 |
| Gene No. | 46826                     | Strand  | +                   |
| Start    | 1                         | End     | 670                 |
| Name     | OJ990325_09.9921.C2.o2.tm | Method  | TBLASTX:Maize       |
| Start    | 2                         | End     | 253                 |
| GI       | none                      | Score   | 268                 |
| Exons    | 2..253, 40..252           |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22496                     | Seq. ID | OJ990325_09.9921.C2 |
| Gene No. | 46826                     | Strand  | +                   |
| Start    | 1                         | End     | 670                 |
| Name     | OJ990325_09.9921.C2.o1.gs | Method  | GENSCAN             |
| Start    | 93                        | End     | 575                 |
| GI       | none                      | Score   | .98                 |



Exons 93..575

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22496                     | Seq. ID | OJ990325_09.9921.C2 |
| Gene No. | 46826                     | Strand  | +                   |
| Start    | 1                         | End     | 670                 |
| Name     | OJ990325_09.9921.C2.o1.tw | Method  | TBLASTX:Wheat       |
| Start    | 188                       | End     | 670                 |
| GI       | none                      | Score   | 617                 |
| Exons    | 188..670, 220..609        |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22496                     | Seq. ID | OJ990325_09.9921.C2 |
| Gene No. | 46826                     | Strand  | +                   |
| Start    | 1                         | End     | 670                 |
| Name     | OJ990325_09.9921.C2.o2.ts | Method  | TBLASTX:Soybean     |
| Start    | 194                       | End     | 439                 |
| GI       | none                      | Score   | 207                 |
| Exons    | 194..439, 211..339        |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22496                     | Seq. ID | OJ990325_09.9921.C2 |
| Gene No. | 46826                     | Strand  | +                   |
| Start    | 1                         | End     | 670                 |
| Name     | OJ990325_09.9921.C2.o1.tm | Method  | TBLASTX:Maize       |
| Start    | 259                       | End     | 613                 |
| GI       | none                      | Score   | 482                 |
| Exons    | 259..609, 260..613        |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22497  | Seq. ID | OJ990325_09.9921.C5 |
| Gene No. | 46827  | Strand  | +                   |
| Start    | 346  | End     | 2289                |
| Name     | OJ990325_09.9921.C5.o1.gs                    | Method  | GENSCAN             |
| Start    | 346  | End     | 2289                |
| GI       | none   | Score   | .78                 |
| Exons    | 346..409, 1059..1095, 1280..1383, 2183..2289 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22497   | Seq. ID | OJ990325_09.9921.C5 |
| Gene No.    | 46828   | Strand  | +                   |
| Start       | 6633  | End     | 7613                |
| Name        | OJ990325_09.9921.C5.o2.np                           | Method  | AAT/NAP             |
| Start       | 6633  | End     | 7613                |
| GI          | 4680179   | Score   | 865                 |
| Exons       | 6633..7613  |         |                     |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22497  | Seq. ID | OJ990325_09.9921.C5 |
| Gene No.    | 46829  | Strand  | -                   |
| Start       | 2182   | End     | 3860                |
| Name        | OJ990325_09.9921.C5.o1.np  | Method  | AAT/NAP             |
| Start       | 2182   | End     | 3860                |
| GI          | 6907087  | Score   | 741                 |
| Exons       | 2182..2283, 2825..3860   |         |                     |
| GI Descrip. | (AP001129) ESTs C72771(E2215),AU082313(E2215) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22497 | Seq. ID | OJ990325_09.9921.C5 |
| Gene No. | 46830 | Strand  | -                   |
| Start    | 8022  | End     | 10039               |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Name        | OJ990325_09.9921.C5.o4.np  | Method  | AAT/NAP             |
| Start       | 7923   | End     | 8872                |
| GI          | 5852181  | Score   | 130                 |
| Exons       | 7923..8200, 8652..8872   |         |                     |
| GI Descrip. | (AL117265) zhb0011.1 [Oryza sativa]                                    |         |                     |
|             |  |         |                     |
| Seq. No.    | 22497  | Seq. ID | OJ990325_09.9921.C5 |
| Gene No.    | 46830  | Strand  | -                   |
| Start       | 8022   | End     | 10039               |
| Name        | OJ990325_09.9921.C5.o3.gs  | Method  | GENSCAN             |
| Start       | 8022   | End     | 10039               |
| GI          | none   | Score   | .82                 |
| Exons       | 8022..8234, 8314..8448, 10037..10039                                   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22497  | Seq. ID | OJ990325_09.9921.C5 |
| Gene No.    | 46831  | Strand  | -                   |
| Start       | 13703  | End     | 15738               |
| Name        | OJ990325_09.9921.C5.o1.tw  | Method  | TBLASTX:Wheat       |
| Start       | 6867   | End     | 7227                |
| GI          | none   | Score   | 131                 |
| Exons       | 6867..7088, 6894..7028, 7076..7174, 7097..7165, 7161..7223, 7162..7227 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22497  | Seq. ID | OJ990325_09.9921.C5 |
| Gene No.    | 46831  | Strand  | -                   |
| Start       | 13703  | End     | 15738               |
| Name        | OJ990325_09.9921.C5.o4.gs  | Method  | GENSCAN             |
| Start       | 13703  | End     | 14995               |
| GI          | none   | Score   | .44                 |
| Exons       | 13703..14379, 14856..14995   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22497  | Seq. ID | OJ990325_09.9921.C5 |
| Gene No.    | 46831  | Strand  | -                   |
| Start       | 13703  | End     | 15738               |
| Name        | OJ990325_09.9921.C5.o6.np  | Method  | AAT/NAP             |
| Start       | 13848  | End     | 15738               |
| GI          | 5852181  | Score   | 130                 |
| Exons       | 13848..13929, 15120..15412, 15701..15738                               |         |                     |
| GI Descrip. | (AL117265) zhb0011.1 [Oryza sativa]                                    |         |                     |
|             |  |         |                     |
| Seq. No.    | 22498  | Seq. ID | OJ990325_09.9921.C6 |
| Gene No.    | 46832  | Strand  | +                   |
| Start       | 1385   | End     | 1879                |
| Name        | OJ990325_09.9921.C6.o1.gs  | Method  | GENSCAN             |
| Start       | 1385   | End     | 1879                |
| GI          | none   | Score   | .81                 |
| Exons       | 1385..1456, 1549..1680, 1785..1879                                     |         |                     |
|             |  |         |                     |
| Seq. No.    | 22498  | Seq. ID | OJ990325_09.9921.C6 |
| Gene No.    | 46833  | Strand  | +                   |
| Start       | 2833   | End     | 6499                |
| Name        | OJ990325_09.9921.C6.o2.np  | Method  | AAT/NAP             |
| Start       | 2833   | End     | 6499                |
| GI          | 6721516  | Score   | 581                 |
| Exons       | 2833..3082, 3496..3725, 3795..3835, 6280..6499                         |         |                     |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa]                         |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22498   | Seq. ID | OJ990325_09.9921.C6 |
| Gene No.    | 46834   | Strand  | -                   |
| Start       | 751   | End     | 1716                |
| Name        | OJ990325_09.9921.C6.o1.np                                       | Method  | AAT/NAP             |
| Start       | 751   | End     | 1716                |
| GI          | 3342234   | Score   | 133                 |
| Exons       | 751..1410, 1621..1716   |         |                     |
| GI Descrip. | (U93909) nuclear antigen EBNA-1 [Cercopithecine herpesvirus 15] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22499                                  | Seq. ID | OJ990325_09.9921.C7 |
| Gene No. | 46835                                  | Strand  | -                   |
| Start    | 154                                    | End     | 1930                |
| Name     | OJ990325_09.9921.C7.o2.ts              | Method  | TBLASTX:Soybean     |
| Start    | 124                                    | End     | 805                 |
| GI       | none                                   | Score   | 76                  |
| Exons    | 124..393, 218..385, 440..805, 462..803 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22499  | Seq. ID | OJ990325_09.9921.C7 |
| Gene No. | 46835  | Strand  | -                   |
| Start    | 154  | End     | 1930                |
| Name     | OJ990325_09.9921.C7.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 132  | End     | 817                 |
| GI       | none   | Score   | 93                  |
| Exons    | 132..242, 143..436, 152..241, 157..438, 368..454, 372..482, 440..817, 441..812 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22499   | Seq. ID | OJ990325_09.9921.C7 |
| Gene No.    | 46835   | Strand  | -                   |
| Start       | 154   | End     | 1930                |
| Name        | OJ990325_09.9921.C7.o1.np   | Method  | AAT/NAP             |
| Start       | 154   | End     | 1930                |
| GI          | 6630685   | Score   | 2079                |
| Exons       | 154..1816, 1905..1930   |         |                     |
| GI Descrip. | (AP000969) Similar to copia-type pol polyprotein. (AF105716) [Oryza sativa] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22499                                  | Seq. ID | OJ990325_09.9921.C7 |
| Gene No. | 46835                                  | Strand  | -                   |
| Start    | 154                                    | End     | 1930                |
| Name     | OJ990325_09.9921.C7.o1.tc              | Method  | TBLASTX:Cress       |
| Start    | 172                                    | End     | 628                 |
| GI       | none                                   | Score   | 71                  |
| Exons    | 172..417, 224..391, 425..535, 539..628 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22499                     | Seq. ID | OJ990325_09.9921.C7 |
| Gene No. | 46835                     | Strand  | -                   |
| Start    | 154                       | End     | 1930                |
| Name     | OJ990325_09.9921.C7.o2.tw | Method  | TBLASTX:Wheat       |
| Start    | 572                       | End     | 1003                |
| GI       | none                      | Score   | 101                 |
| Exons    | 572..829, 842..1003       |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22499                     | Seq. ID | OJ990325_09.9921.C7 |
| Gene No. | 46835                     | Strand  | -                   |
| Start    | 154                       | End     | 1930                |
| Name     | OJ990325_09.9921.C7.o2.tm | Method  | TBLASTX:Maize       |
| Start    | 941                       | End     | 1372                |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| GI          | none   | Score   | 126                 |
| Exons       | 941..1372, 942..1088, 944..1363  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22499  | Seq. ID | OJ990325_09.9921.C7 |
| Gene No.    | 46835  | Strand  | -                   |
| Start       | 154  | End     | 1930                |
| Name        | OJ990325_09.9921.C7.o1.ts  | Method  | TBLASTX:Soybean     |
| Start       | 1179   | End     | 1791                |
| GI          | 5509260  | Score   | 255                 |
| Exons       | 1179..1502, 1179..1394, 1184..1498, 1495..1791, 1496..1696, 1501..1698   |         |                     |
| GI Descrip. | -  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22499  | Seq. ID | OJ990325_09.9921.C7 |
| Gene No.    | 46835  | Strand  | -                   |
| Start       | 154  | End     | 1930                |
| Name        | OJ990325_09.9921.C7.o1.tw  | Method  | TBLASTX:Wheat       |
| Start       | 1187   | End     | 1662                |
| GI          | none   | Score   | 87                  |
| Exons       | 1187..1363, 1193..1498, 1194..1379, 1197..1502, 1404..1502, 1405..1512, 1495..1539, 1496..1531, 1540..1566, 1573..1662 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22499  | Seq. ID | OJ990325_09.9921.C7 |
| Gene No.    | 46835  | Strand  | -                   |
| Start       | 154  | End     | 1930                |
| Name        | OJ990325_09.9921.C7.o3.tm  | Method  | TBLASTX:Maize       |
| Start       | 1495   | End     | 1815                |
| GI          | none   | Score   | 78                  |
| Exons       | 1495..1563, 1496..1567, 1559..1762, 1573..1776, 1573..1815   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22500  | Seq. ID | OJ990325_09.9921.C8 |
| Gene No.    | 46836  | Strand  | +                   |
| Start       | 1  | End     | 4126                |
| Name        | OJ990325_09.9921.C8.o1.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 4126                |
| GI          | 5852180  | Score   | 669                 |
| Exons       | 1..35, 1642..1695, 2681..2798, 2850..3261, 3962..4126  |         |                     |
| GI Descrip. | (AL117265) zhb00010.1 [Oryza sativa]   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22500  | Seq. ID | OJ990325_09.9921.C8 |
| Gene No.    | 46837  | Strand  | -                   |
| Start       | 94   | End     | 3308                |
| Name        | OJ990325_09.9921.C8.o1.gs  | Method  | GENSCAN             |
| Start       | 94   | End     | 3308                |
| GI          | none   | Score   | .41                 |
| Exons       | 94..291, 484..673, 2809..2933, 3005..3308  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22500  | Seq. ID | OJ990325_09.9921.C8 |
| Gene No.    | 46837  | Strand  | -                   |
| Start       | 94   | End     | 3308                |
| Name        | OJ990325_09.9921.C8.o1.gp  | Method  | AAT/GAP             |
| Start       | 1544   | End     | 1926                |
| GI          | uC-osflcyp033a04b1   | Score   | 680                 |
| Exons       | 1544..1926   |         |                     |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10'                       |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22501   | Seq. ID | OJ990325_09.9921.C9 |
| Gene No.    | 46838   | Strand  | +                   |
| Start       | 1423  | End     | 2517                |
| Name        | OJ990325_09.9921.C9.o3.np                       | Method  | AAT/NAP             |
| Start       | 1423  | End     | 2517                |
| GI          | 4680186   | Score   | 350                 |
| Exons       | 1423..1477, 2317..2517                          |         |                     |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22501  | Seq. ID | OJ990325_09.9921.C9 |
| Gene No.    | 46839  | Strand  | -                   |
| Start       | 1  | End     | 3195                |
| Name        | OJ990325_09.9921.C9.o1.np                                | Method  | AAT/NAP             |
| Start       | 1  | End     | 854                 |
| GI          | 3645899  | Score   | 642                 |
| Exons       | 1..31, 154..854  |         |                     |
| GI Descrip. | (U68408) 5' end not determined experimentally [Zea mays] |         |                     |

|          |                                  |         |                     |
|----------|----------------------------------|---------|---------------------|
| Seq. No. | 22501                            | Seq. ID | OJ990325_09.9921.C9 |
| Gene No. | 46839                            | Strand  | -                   |
| Start    | 1                                | End     | 3195                |
| Name     | OJ990325_09.9921.C9.o1.gs        | Method  | GENSCAN             |
| Start    | 108                              | End     | 2346                |
| GI       | none                             | Score   | .59                 |
| Exons    | 108..565, 1110..1342, 2282..2346 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22501                     | Seq. ID | OJ990325_09.9921.C9 |
| Gene No. | 46839                     | Strand  | -                   |
| Start    | 1                         | End     | 3195                |
| Name     | OJ990325_09.9921.C9.o1.tm | Method  | TBLASTX:Maize       |
| Start    | 147                       | End     | 482                 |
| GI       | none                      | Score   | 286                 |
| Exons    | 147..482, 148..477        |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22501                     | Seq. ID | OJ990325_09.9921.C9 |
| Gene No. | 46839                     | Strand  | -                   |
| Start    | 1                         | End     | 3195                |
| Name     | OJ990325_09.9921.C9.o1.tw | Method  | TBLASTX:Wheat       |
| Start    | 231                       | End     | 477                 |
| GI       | none                      | Score   | 93                  |
| Exons    | 231..476, 247..477        |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22501                     | Seq. ID | OJ990325_09.9921.C9 |
| Gene No. | 46839                     | Strand  | -                   |
| Start    | 1                         | End     | 3195                |
| Name     | OJ990325_09.9921.C9.o2.tw | Method  | TBLASTX:Wheat       |
| Start    | 576                       | End     | 830                 |
| GI       | none                      | Score   | 99                  |
| Exons    | 576..830, 595..816        |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22501                                  | Seq. ID | OJ990325_09.9921.C9 |
| Gene No. | 46839                                  | Strand  | -                   |
| Start    | 1                                      | End     | 3195                |
| Name     | OJ990325_09.9921.C9.o2.tm              | Method  | TBLASTX:Maize       |
| Start    | 582                                    | End     | 966                 |
| GI       | none                                   | Score   | 96                  |
| Exons    | 582..845, 607..825, 872..964, 874..966 |         |                     |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22501  | Seq. ID | OJ990325_09.9921.C9  |
| Gene No.    | 46839  | Strand  | -                    |
| Start       | 1  | End     | 3195                 |
| Name        | OJ990325_09.9921.C9.o2.np  | Method  | AAT/NAP              |
| Start       | 865  | End     | 3195                 |
| GI          | 4416301  | Score   | 84                   |
| Exons       | 865..1033, 3167..3195  |         |                      |
| GI Descrip. | (AF105716) gag protein [Zea mays]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22501  | Seq. ID | OJ990325_09.9921.C9  |
| Gene No.    | 46839  | Strand  | -                    |
| Start       | 1  | End     | 3195                 |
| Name        | OJ990325_09.9921.C9.o1.gp  | Method  | AAT/GAP              |
| Start       | 2069   | End     | 2450                 |
| GI          | uC-osflcyp033a04b1   | Score   | 655                  |
| Exons       | 2069..2450   |         |                      |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                      |
|             |  |         |                      |
| Seq. No.    | 22502  | Seq. ID | OJ990325_09.9921.C10 |
| Gene No.    | 46840  | Strand  | -                    |
| Start       | 1  | End     | 2194                 |
| Name        | OJ990325_09.9921.C10.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 2194                 |
| GI          | 4680179  | Score   | 3084                 |
| Exons       | 1..2194  |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22502  | Seq. ID | OJ990325_09.9921.C10 |
| Gene No.    | 46840  | Strand  | -                    |
| Start       | 1  | End     | 2194                 |
| Name        | OJ990325_09.9921.C10.o5.tw   | Method  | TBLASTX:Wheat        |
| Start       | 5  | End     | 260                  |
| GI          | none   | Score   | 130                  |
| Exons       | 5..259, 27..260  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22502  | Seq. ID | OJ990325_09.9921.C10 |
| Gene No.    | 46840  | Strand  | -                    |
| Start       | 1  | End     | 2194                 |
| Name        | OJ990325_09.9921.C10.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 107  | End     | 706                  |
| GI          | none   | Score   | 211                  |
| Exons       | 107..547, 123..548, 545..706, 552..698   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22502  | Seq. ID | OJ990325_09.9921.C10 |
| Gene No.    | 46840  | Strand  | -                    |
| Start       | 1  | End     | 2194                 |
| Name        | OJ990325_09.9921.C10.o1.tw   | Method  | TBLASTX:Wheat        |
| Start       | 260  | End     | 880                  |
| GI          | none   | Score   | 67                   |
| Exons       | 260..880, 263..385, 372..830   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22502  | Seq. ID | OJ990325_09.9921.C10 |
| Gene No.    | 46840  | Strand  | -                    |
| Start       | 1  | End     | 2194                 |
| Name        | OJ990325_09.9921.C10.o3.tm   | Method  | TBLASTX:Maize        |

|       |                                 |       |      |
|-------|---------------------------------|-------|------|
| Start | 755                             | End   | 1047 |
| GI    | none                            | Score | 200  |
| Exons | 755..1045, 759..1046, 892..1047 |       |      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22502                      | Seq. ID | OJ990325_09.9921.C10 |
| Gene No. | 46840                      | Strand  | -                    |
| Start    | 1                          | End     | 2194                 |
| Name     | OJ990325_09.9921.C10.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 845                        | End     | 1100                 |
| GI       | none                       | Score   | 149                  |
| Exons    | 845..1099, 846..1100       |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22502                      | Seq. ID | OJ990325_09.9921.C10 |
| Gene No. | 46840                      | Strand  | -                    |
| Start    | 1                          | End     | 2194                 |
| Name     | OJ990325_09.9921.C10.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 893                        | End     | 1429                 |
| GI       | none                       | Score   | 347                  |
| Exons    | 893..1429, 894..1385       |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22502                              | Seq. ID | OJ990325_09.9921.C10 |
| Gene No. | 46840                              | Strand  | -                    |
| Start    | 1                                  | End     | 2194                 |
| Name     | OJ990325_09.9921.C10.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 1451                               | End     | 1814                 |
| GI       | none                               | Score   | 178                  |
| Exons    | 1451..1813, 1460..1813, 1464..1814 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22502                              | Seq. ID | OJ990325_09.9921.C10 |
| Gene No. | 46840                              | Strand  | -                    |
| Start    | 1                                  | End     | 2194                 |
| Name     | OJ990325_09.9921.C10.o3.tw         | Method  | TBLASTX:Wheat        |
| Start    | 1460                               | End     | 1885                 |
| GI       | none                               | Score   | 260                  |
| Exons    | 1460..1822, 1460..1885, 1464..1853 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22502                      | Seq. ID | OJ990325_09.9921.C10 |
| Gene No. | 46840                      | Strand  | -                    |
| Start    | 1                          | End     | 2194                 |
| Name     | OJ990325_09.9921.C10.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 1634                       | End     | 1879                 |
| GI       | none                       | Score   | 92                   |
| Exons    | 1634..1879, 1635..1862     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22502                      | Seq. ID | OJ990325_09.9921.C10 |
| Gene No. | 46840                      | Strand  | -                    |
| Start    | 1                          | End     | 2194                 |
| Name     | OJ990325_09.9921.C10.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 1820                       | End     | 2167                 |
| GI       | none                       | Score   | 126                  |
| Exons    | 1820..2167, 1821..2162     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22502                      | Seq. ID | OJ990325_09.9921.C10 |
| Gene No. | 46840                      | Strand  | -                    |
| Start    | 1                          | End     | 2194                 |
| Name     | OJ990325_09.9921.C10.o4.tw | Method  | TBLASTX:Wheat        |
| Start    | 1886                       | End     | 2188                 |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| GI          | none  | Score   | 247                  |
| Exons       | 1886..2188, 1902..2186  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22502   | Seq. ID | OJ990325_09.9921.C10 |
| Gene No.    | 46840   | Strand  | -                    |
| Start       | 1   | End     | 2194                 |
| Name        | OJ990325_09.9921.C10.o1.ts  | Method  | TBLASTX:Soybean      |
| Start       | 1901  | End     | 2191                 |
| GI          | none  | Score   | 189                  |
| Exons       | 1901..2191, 1902..2189  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22503   | Seq. ID | OJ990325_09.9921.C12 |
| Gene No.    | 46841   | Strand  | -                    |
| Start       | 303   | End     | 9219                 |
| Name        | OJ990325_09.9921.C12.o1.gs  | Method  | GENSCAN              |
| Start       | 303   | End     | 6660                 |
| GI          | none  | Score   | .6                   |
| Exons       | 303..521, 888..1263, 1484..1995, 4123..4287, 5310..5512, 5557..5743, 5754..6107, 6529..6660 |         |                      |
|             |   |         |                      |
| Seq. No.    | 22503   | Seq. ID | OJ990325_09.9921.C12 |
| Gene No.    | 46841   | Strand  | -                    |
| Start       | 303   | End     | 9219                 |
| Name        | OJ990325_09.9921.C12.o1.np  | Method  | AAT/NAP              |
| Start       | 961   | End     | 2232                 |
| GI          | 4680179   | Score   | 551                  |
| Exons       | 961..1206, 1369..2232   |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica]   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22503   | Seq. ID | OJ990325_09.9921.C12 |
| Gene No.    | 46841   | Strand  | -                    |
| Start       | 303   | End     | 9219                 |
| Name        | OJ990325_09.9921.C12.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 1483  | End     | 1746                 |
| GI          | none  | Score   | 67                   |
| Exons       | 1483..1746, 1643..1732  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22503   | Seq. ID | OJ990325_09.9921.C12 |
| Gene No.    | 46841   | Strand  | -                    |
| Start       | 303   | End     | 9219                 |
| Name        | OJ990325_09.9921.C12.o5.tw  | Method  | TBLASTX:Wheat        |
| Start       | 1627  | End     | 1986                 |
| GI          | none  | Score   | 134                  |
| Exons       | 1627..1986, 1691..1984  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22503   | Seq. ID | OJ990325_09.9921.C12 |
| Gene No.    | 46841   | Strand  | -                    |
| Start       | 303   | End     | 9219                 |
| Name        | OJ990325_09.9921.C12.o2.np  | Method  | AAT/NAP              |
| Start       | 6445  | End     | 9076                 |
| GI          | 6691191   | Score   | 2033                 |
| Exons       | 6445..9076  |         |                      |
| GI Descrip. | (AC007534) F7F22.15 [Arabidopsis thaliana]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22503   | Seq. ID | OJ990325_09.9921.C12 |
| Gene No.    | 46841   | Strand  | -                    |
| Start       | 303   | End     | 9219                 |



|          |  |         |                      |
|----------|--|---------|----------------------|
| Name     | OJ990325_09.9921.C12.o2.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 6538   | End     | 7026                 |
| GI       | none   | Score   | 125                  |
| Exons    | 6538..6627, 6637..7026, 6770..7024             |         |                      |
|          |  |         |                      |
| Seq. No. | 22503  | Seq. ID | OJ990325_09.9921.C12 |
| Gene No. | 46841  | Strand  | -                    |
| Start    | 303  | End     | 9219                 |
| Name     | OJ990325_09.9921.C12.o3.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 6634   | End     | 7014                 |
| GI       | none   | Score   | 133                  |
| Exons    | 6634..7014, 6635..6955                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22503  | Seq. ID | OJ990325_09.9921.C12 |
| Gene No. | 46841  | Strand  | -                    |
| Start    | 303  | End     | 9219                 |
| Name     | OJ990325_09.9921.C12.o3.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 7027   | End     | 7348                 |
| GI       | none   | Score   | 161                  |
| Exons    | 7027..7287, 7028..7285, 7319..7348, 7321..7347 |         |                      |
|          |  |         |                      |
| Seq. No. | 22503  | Seq. ID | OJ990325_09.9921.C12 |
| Gene No. | 46841  | Strand  | -                    |
| Start    | 303  | End     | 9219                 |
| Name     | OJ990325_09.9921.C12.o6.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 7039   | End     | 7285                 |
| GI       | none   | Score   | 131                  |
| Exons    | 7039..7284, 7130..7285                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22503  | Seq. ID | OJ990325_09.9921.C12 |
| Gene No. | 46841  | Strand  | -                    |
| Start    | 303  | End     | 9219                 |
| Name     | OJ990325_09.9921.C12.o2.gs                     | Method  | GENSCAN              |
| Start    | 7114   | End     | 7748                 |
| GI       | none   | Score   | .6                   |
| Exons    | 7114..7557, 7737..7748                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22503  | Seq. ID | OJ990325_09.9921.C12 |
| Gene No. | 46841  | Strand  | -                    |
| Start    | 303  | End     | 9219                 |
| Name     | OJ990325_09.9921.C12.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 7369   | End     | 7671                 |
| GI       | none   | Score   | 79                   |
| Exons    | 7369..7671, 7370..7519, 7571..7657             |         |                      |
|          |  |         |                      |
| Seq. No. | 22503  | Seq. ID | OJ990325_09.9921.C12 |
| Gene No. | 46841  | Strand  | -                    |
| Start    | 303  | End     | 9219                 |
| Name     | OJ990325_09.9921.C12.o4.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 7465   | End     | 7934                 |
| GI       | none   | Score   | 80                   |
| Exons    | 7465..7668, 7648..7722, 7734..7934, 7800..7931 |         |                      |
|          |  |         |                      |
| Seq. No. | 22503  | Seq. ID | OJ990325_09.9921.C12 |
| Gene No. | 46841  | Strand  | -                    |
| Start    | 303  | End     | 9219                 |
| Name     | OJ990325_09.9921.C12.o5.ts                     | Method  | TBLASTX:Soybean      |

Start 7788  
 GI none  
 Exons 7788..7928, 7812..7928

End 7928  
 Score 104

Seq. No. 22503  
 Gene No. 46841  
 Start 303  
 Name OJ990325\_09.9921.C12.o1.tw  
 Start 7961  
 GI none  
 Exons 7961..8314, 8049..8291

Seq. ID OJ990325\_09.9921.C12  
 Strand -  
 End 9219  
 Method TBLASTX:Wheat  
 End 8314  
 Score 183

Seq. No. 22503  
 Gene No. 46841  
 Start 303  
 Name OJ990325\_09.9921.C12.o4.ts  
 Start 8039  
 GI none  
 Exons 8039..8251, 8039..8314, 8058..8294

Seq. ID OJ990325\_09.9921.C12  
 Strand -  
 End 9219  
 Method TBLASTX:Soybean  
 End 8314  
 Score 82

Seq. No. 22503  
 Gene No. 46841  
 Start 303  
 Name OJ990325\_09.9921.C12.o1.ts  
 Start 8515  
 GI none  
 Exons 8515..8622, 8527..8622, 8621..8926, 8622..8924

Seq. ID OJ990325\_09.9921.C12  
 Strand -  
 End 9219  
 Method TBLASTX:Soybean  
 End 8926  
 Score 49

Seq. No. 22503  
 Gene No. 46841  
 Start 303  
 Name OJ990325\_09.9921.C12.o2.tw  
 Start 8536  
 GI none  
 Exons 8536..8622, 8621..8926, 8622..8924

Seq. ID OJ990325\_09.9921.C12  
 Strand -  
 End 9219  
 Method TBLASTX:Wheat  
 End 8926  
 Score 148

Seq. No. 22503  
 Gene No. 46841  
 Start 303  
 Name OJ990325\_09.9921.C12.o3.gs  
 Start 8579  
 GI none  
 Exons 8579..9219

Seq. ID OJ990325\_09.9921.C12  
 Strand -  
 End 9219  
 Method GENSCAN  
 End 9219  
 Score .98

Seq. No. 22504  
 Gene No. 46842  
 Start 239  
 Name OJ990325\_09.9921.C13.o1.gs  
 Start 239  
 GI none  
 Exons 239..435, 507..951

Seq. ID OJ990325\_09.9921.C13  
 Strand +  
 End 951  
 Method GENSCAN  
 End 951  
 Score .61

Seq. No. 22504  
 Gene No. 46843  
 Start 1221  
 Name OJ990325\_09.9921.C13.o2.gs  
 Start 1221

Seq. ID OJ990325\_09.9921.C13  
 Strand -  
 End 1556  
 Method GENSCAN  
 End 1556

|             |  |         |                      |
|-------------|--|---------|----------------------|
| GI          | none   | Score   | .55                  |
| Exons       | 1221..1556   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No.    | 46844  | Strand  | +                    |
| Start       | 72   | End     | 376                  |
| Name        | OJ990325_09.9921.C14.o1.gs   | Method  | GENSCAN              |
| Start       | 72   | End     | 376                  |
| GI          | none   | Score   | .82                  |
| Exons       | 72..194, 227..376  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No.    | 46845  | Strand  | +                    |
| Start       | 3480   | End     | 5609                 |
| Name        | OJ990325_09.9921.C14.o3.gs   | Method  | GENSCAN              |
| Start       | 3480   | End     | 5609                 |
| GI          | none   | Score   | .57                  |
| Exons       | 3480..3554, 4239..4468, 4551..4830, 5139..5609                             |         |                      |
|             |  |         |                      |
| Seq. No.    | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No.    | 46846  | Strand  | +                    |
| Start       | 12105  | End     | 16155                |
| Name        | OJ990325_09.9921.C14.o3.np   | Method  | AAT/NAP              |
| Start       | 12105  | End     | 16155                |
| GI          | 4680183  | Score   | 112                  |
| Exons       | 12105..12137, 16066..16155   |         |                      |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica]                    |         |                      |
|             |  |         |                      |
| Seq. No.    | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No.    | 46846  | Strand  | +                    |
| Start       | 12105  | End     | 16155                |
| Name        | OJ990325_09.9921.C14.o1.gp   | Method  | AAT/GAP              |
| Start       | 12855  | End     | 13205                |
| GI          | 61605_3.R1084  | Score   | 420                  |
| Exons       | 12855..12883, 12933..13205   |         |                      |
| GI Descrip. | '1402920/emb CAA66965  2.0e-20 (X98321) peroxidase [Arabidopsis thaliana]' |         |                      |
|             |  |         |                      |
| Seq. No.    | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No.    | 46846  | Strand  | +                    |
| Start       | 12105  | End     | 16155                |
| Name        | OJ990325_09.9921.C14.o5.gs   | Method  | GENSCAN              |
| Start       | 13783  | End     | 15175                |
| GI          | none   | Score   | .58                  |
| Exons       | 13783..13861, 14562..15175   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No.    | 46847  | Strand  | +                    |
| Start       | 21983  | End     | 23364                |
| Name        | OJ990325_09.9921.C14.o7.gs   | Method  | GENSCAN              |
| Start       | 21983  | End     | 23364                |
| GI          | none   | Score   | .46                  |
| Exons       | 21983..22305, 22705..22803, 22824..22914, 23041..23364                     |         |                      |
|             |  |         |                      |
| Seq. No.    | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No.    | 46848  | Strand  | -                    |
| Start       | 657  | End     | 2843                 |

|       |  |        |         |
|-------|--|--------|---------|
| Name  | OJ990325_09.9921.C14.o2.gs   | Method | GENSCAN |
| Start | 657  | End    | 2843    |
| GI    | none   | Score  | .42     |
| Exons | 657..872, 1464..1747, 1752..1845, 2026..2340, 2472..2592, 2698..2843 |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46849  | Strand  | -                    |
| Start    | 6175   | End     | 11919                |
| Name     | OJ990325_09.9921.C14.o1.np   | Method  | AAT/NAP              |
| Start    | 5896   | End     | 11919                |
| GI       | 5922631  | Score   | 6410                 |
| Exons    | 5896..8412, 9019..9899, 10026..10177, 10208..10785, 10831..11033, 11292..11536, 11795..11919 |         |                      |

GI Descrip. (AP000492) ESTs C26347(C12145),AU078074(C12145) correspond to a region of the predicted gene.; similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativa] gi|6016864|dbj|BAA85207.1| (AP000570) ESTs C26347(C12145),AU078074(C12145) correspond to a region of the predicted gene.; Similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativ

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46849  | Strand  | -                    |
| Start    | 6175   | End     | 11919                |
| Name     | OJ990325_09.9921.C14.o4.gs   | Method  | GENSCAN              |
| Start    | 6175   | End     | 11919                |
| GI       | none   | Score   | .81                  |
| Exons    | 6175..6749, 6860..7310, 7438..7788, 7964..8930, 9027..9281, 9314..9572, 9726..9872, 10026..10295, 10350..10525, 10571..11919 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46850  | Strand  | -                    |
| Start    | 13587  | End     | 18397                |
| Name     | OJ990325_09.9921.C14.o2.np   | Method  | AAT/NAP              |
| Start    | 13587  | End     | 18397                |
| GI       | 6063554  | Score   | 342                  |
| Exons    | 13587..13762, 14409..14437, 14789..15006, 15123..15413, 18369..18397 |         |                      |

GI Descrip. (AP000615) ESTs AU075609(C63344),C71850(E0464),C98611(E0464) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22505                      | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46850                      | Strand  | -                    |
| Start    | 13587                      | End     | 18397                |
| Name     | OJ990325_09.9921.C14.o3.gp | Method  | AAT/GAP              |
| Start    | 14213                      | End     | 14942                |
| GI       | 101153_1.R1084             | Score   | 483                  |
| Exons    | 14213..14441, 14791..14942 |         |                      |

GI Descrip. '5852170/emb|AL117265.1|OST17804 1.0e-115 Oryza sativa indica(GLA4) genomic DNA; chromosome 4, BAC clone:tl7804'

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22505                      | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46851                      | Strand  | -                    |
| Start    | 19652                      | End     | 20968                |
| Name     | OJ990325_09.9921.C14.o4.np | Method  | AAT/NAP              |

|             |  |       |       |
|-------------|--|-------|-------|
| Start       | 19652  | End   | 20968 |
| GI          | 6721561  | Score | 1050  |
| Exons       | 19652..20413, 20494..20552, 20622..20812, 20902..20968   |       |       |
| GI Descrip. | (AP001073) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]                            |       |       |
|             | gi 6815086 dbj BAA90372.1  (AP001081) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa] |       |       |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No.    | 46852  | Strand  | -                    |
| Start       | 21026  | End     | 24348                |
| Name        | OJ990325_09.9921.C14.o6.np                             | Method  | AAT/NAP              |
| Start       | 21026  | End     | 24348                |
| GI          | 6721512  | Score   | 75                   |
| Exons       | 21026..21055, 22513..22614, 22642..22748, 24273..24348 |         |                      |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa]         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853  | Strand  | -                    |
| Start    | 24914  | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1335   | End     | 2031                 |
| GI       | none   | Score   | 83                   |
| Exons    | 1335..1670, 1337..1438, 1338..1634, 1339..1671, 1666..2031, 1670..2023 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853  | Strand  | -                    |
| Start    | 24914  | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o2.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 1371   | End     | 2013                 |
| GI       | none   | Score   | 39                   |
| Exons    | 1371..1604, 1519..1611, 1623..1655, 1657..2013, 1676..2008 |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22505                       | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                       | Strand  | -                    |
| Start    | 24914                       | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o10.tw | Method  | TBLASTX:Wheat        |
| Start    | 1798                        | End     | 2214                 |
| GI       | none                        | Score   | 80                   |
| Exons    | 1798..2034, 2062..2214      |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853  | Strand  | -                    |
| Start    | 24914  | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 2146   | End     | 2584                 |
| GI       | none   | Score   | 183                  |
| Exons    | 2146..2343, 2147..2335, 2149..2340, 2340..2582, 2341..2583, 2342..2584, 2342..2581, 2343..2582 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22505                      | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                      | Strand  | -                    |
| Start    | 24914                      | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 2386                       | End     | 2994                 |

GI 5509260 Score 299  
Exons 2386..2769, 2388..2768, 2778..2885, 2779..2886, 2888..2992,  
2971..2994

GI Descrip. -

Seq. No. 22505 Seq. ID OJ990325\_09.9921.C14  
Gene No. 46853 Strand -  
Start 24914 End 27873  
Name OJ990325\_09.9921.C14.o2.tw Method TBLASTX:Wheat  
Start 2394 End 2867  
GI none Score 212  
Exons 2394..2744, 2406..2747, 2413..2745, 2778..2867

Seq. No. 22505 Seq. ID OJ990325\_09.9921.C14  
Gene No. 46853 Strand -  
Start 24914 End 27873  
Name OJ990325\_09.9921.C14.o1.tc Method TBLASTX:Cress  
Start 2505 End 2786  
GI none Score 84  
Exons 2505..2786, 2539..2784

Seq. No. 22505 Seq. ID OJ990325\_09.9921.C14  
Gene No. 46853 Strand -  
Start 24914 End 27873  
Name OJ990325\_09.9921.C14.o4.tm Method TBLASTX:Maize  
Start 2701 End 3053  
GI none Score 206  
Exons 2701..2886, 2703..2885, 2869..3015, 2870..3016, 2888..3016,  
2892..3053

Seq. No. 22505 Seq. ID OJ990325\_09.9921.C14  
Gene No. 46853 Strand -  
Start 24914 End 27873  
Name OJ990325\_09.9921.C14.o11.tw Method TBLASTX:Wheat  
Start 3600 End 3890  
GI none Score 208  
Exons 3600..3890

Seq. No. 22505 Seq. ID OJ990325\_09.9921.C14  
Gene No. 46853 Strand -  
Start 24914 End 27873  
Name OJ990325\_09.9921.C14.o4.tw Method TBLASTX:Wheat  
Start 5872 End 6486  
GI none Score 76  
Exons 5872..6009, 5995..6486, 6224..6325, 6377..6466

Seq. No. 22505 Seq. ID OJ990325\_09.9921.C14  
Gene No. 46853 Strand -  
Start 24914 End 27873  
Name OJ990325\_09.9921.C14.o7.tm Method TBLASTX:Maize  
Start 5911 End 6165  
GI none Score 87  
Exons 5911..6012, 5939..6013, 5992..6165

Seq. No. 22505 Seq. ID OJ990325\_09.9921.C14  
Gene No. 46853 Strand -  
Start 24914 End 27873

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990325_09.9921.C14.o9.tm                                 | Method | TBLASTX:Maize |
| Start | 6256   | End    | 6529          |
| GI    | none   | Score  | 47            |
| Exons | 6256..6342, 6355..6435, 6365..6439, 6422..6529, 6430..6528 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853  | Strand  | -                    |
| Start    | 24914  | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o5.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 6599   | End     | 6987                 |
| GI       | none   | Score   | 56                   |
| Exons    | 6599..6646, 6601..6846, 6677..6847, 6837..6986, 6838..6987 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853  | Strand  | -                    |
| Start    | 24914  | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o3.tm                     | Method  | TBLASTX:Maize        |
| Start    | 6667   | End     | 6993                 |
| GI       | none   | Score   | 153                  |
| Exons    | 6667..6843, 6668..6844, 6837..6992, 6838..6993 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22505                      | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                      | Strand  | -                    |
| Start    | 24914                      | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o6.tw | Method  | TBLASTX:Wheat        |
| Start    | 7324                       | End     | 7716                 |
| GI       | none                       | Score   | 219                  |
| Exons    | 7324..7716, 7370..7711     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22505                      | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                      | Strand  | -                    |
| Start    | 24914                      | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o4.ts | Method  | TBLASTX:Soybean      |
| Start    | 7337                       | End     | 7725                 |
| GI       | none                       | Score   | 143                  |
| Exons    | 7337..7717, 7339..7725     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22505                      | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                      | Strand  | -                    |
| Start    | 24914                      | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o7.tw | Method  | TBLASTX:Wheat        |
| Start    | 7769                       | End     | 8186                 |
| GI       | none                       | Score   | 77                   |
| Exons    | 7769..8182, 7998..8186     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22505  | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853  | Strand  | -                    |
| Start    | 24914  | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o6.tm   | Method  | TBLASTX:Maize        |
| Start    | 7841   | End     | 8284                 |
| GI       | none   | Score   | 67                   |
| Exons    | 7841..7867, 7877..7996, 7877..8038, 8030..8284, 8031..8252, 8036..8257 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22505 | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853 | Strand  | -                    |
| Start    | 24914 | End     | 27873                |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Name     | OJ990325_09.9921.C14.o3.ts         | Method  | TBLASTX:Soybean      |
| Start    | 7952                               | End     | 8344                 |
| GI       | none                               | Score   | 110                  |
| Exons    | 7952..8344, 8178..8336, 8192..8341 |         |                      |
|          |                                    |         |                      |
| Seq. No. | 22505                              | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                              | Strand  | -                    |
| Start    | 24914                              | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o1.tw         | Method  | TBLASTX:Wheat        |
| Start    | 8228                               | End     | 8647                 |
| GI       | none                               | Score   | 201                  |
| Exons    | 8228..8647, 8229..8645             |         |                      |
|          |                                    |         |                      |
| Seq. No. | 22505                              | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                              | Strand  | -                    |
| Start    | 24914                              | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o8.tm         | Method  | TBLASTX:Maize        |
| Start    | 8285                               | End     | 8512                 |
| GI       | none                               | Score   | 62                   |
| Exons    | 8285..8512, 8289..8384, 8469..8510 |         |                      |
|          |                                    |         |                      |
| Seq. No. | 22505                              | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                              | Strand  | -                    |
| Start    | 24914                              | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o5.tm         | Method  | TBLASTX:Maize        |
| Start    | 8516                               | End     | 8872                 |
| GI       | none                               | Score   | 196                  |
| Exons    | 8516..8872, 8526..8831             |         |                      |
|          |                                    |         |                      |
| Seq. No. | 22505                              | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                              | Strand  | -                    |
| Start    | 24914                              | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o5.ts         | Method  | TBLASTX:Soybean      |
| Start    | 8597                               | End     | 8962                 |
| GI       | none                               | Score   | 128                  |
| Exons    | 8597..8731, 8738..8962             |         |                      |
|          |                                    |         |                      |
| Seq. No. | 22505                              | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                              | Strand  | -                    |
| Start    | 24914                              | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o3.tw         | Method  | TBLASTX:Wheat        |
| Start    | 8678                               | End     | 9037                 |
| GI       | none                               | Score   | 248                  |
| Exons    | 8678..9037, 8679..9023, 8693..9031 |         |                      |
|          |                                    |         |                      |
| Seq. No. | 22505                              | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                              | Strand  | -                    |
| Start    | 24914                              | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o8.tw         | Method  | TBLASTX:Wheat        |
| Start    | 9235                               | End     | 9582                 |
| GI       | none                               | Score   | 117                  |
| Exons    | 9235..9582, 9236..9529             |         |                      |
|          |                                    |         |                      |
| Seq. No. | 22505                              | Seq. ID | OJ990325_09.9921.C14 |
| Gene No. | 46853                              | Strand  | -                    |
| Start    | 24914                              | End     | 27873                |
| Name     | OJ990325_09.9921.C14.o9.tw         | Method  | TBLASTX:Wheat        |



Start 10201  
 GI none  
 Exons 10201..10602, 10295..10603

End 10603  
 Score 108

Seq. No. 22505 Seq. ID OJ990325\_09.9921.C14  
 Gene No. 46853 Strand -  
 Start 24914 End 27873  
 Name OJ990325\_09.9921.C14.o7.np Method AAT/NAP  
 Start 24914 End 27873  
 GI 5042463 Score 138  
 Exons 24914..24943, 25476..25589, 25642..25797, 26455..26648,  
 27853..27873  
 GI Descrip. (AC007789) unknown protein [Oryza sativa]

Seq. No. 22506 Seq. ID OJ990325\_09.9921.C15  
 Gene No. 46854 Strand +  
 Start 177 End 6196  
 Name OJ990325\_09.9921.C15.o1.np Method AAT/NAP  
 Start 177 End 6196  
 GI 6063554 Score 383  
 Exons 177..245, 3384..3462, 3560..3740, 4022..4219, 5342..5374,  
 6022..6196  
 GI Descrip. (AP000615) ESTs AU075609(C63344),C71850(E0464),C98611(E0464)  
 correspond to a region of the predicted gene.; hypothetical  
 protein [Oryza sativa]

Seq. No. 22506 Seq. ID OJ990325\_09.9921.C15  
 Gene No. 46854 Strand +  
 Start 177 End 6196  
 Name OJ990325\_09.9921.C15.o1.gs Method GENSCAN  
 Start 748 End 4670  
 GI none Score .7  
 Exons 748..801, 1658..1774, 1863..2614, 3371..3544, 4071..4229,  
 4356..4427, 4541..4670

Seq. No. 22506 Seq. ID OJ990325\_09.9921.C15  
 Gene No. 46855 Strand -  
 Start 7577 End 8351  
 Name OJ990325\_09.9921.C15.o2.gs Method GENSCAN  
 Start 7577 End 8351  
 GI none Score .69  
 Exons 7577..7729, 7816..8138, 8214..8351

Seq. No. 22507 Seq. ID OJ990325\_09.9921.C17  
 Gene No. 46856 Strand +  
 Start 1 End 176  
 Name OJ990325\_09.9921.C17.o1.np Method AAT/NAP  
 Start 1 End 176  
 GI 5852181 Score 114  
 Exons 1..176  
 GI Descrip. (AL117265) zhb0011.1 [Oryza sativa]

Seq. No. 22508 Seq. ID OJ990325\_09.9921.C19  
 Gene No. 46857 Strand +  
 Start 1612 End 6388  
 Name OJ990325\_09.9921.C19.o2.gs Method GENSCAN  
 Start 1612 End 6388

|       |  |       |    |
|-------|--|-------|----|
| GI    | none   | Score | .6 |
| Exons | 1612..1830, 2027..2239, 2604..2760, 3055..3119, 5969..6213, 6295..6388 |       |    |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22508                      | Seq. ID | OJ990325_09.9921.C19 |
| Gene No. | 46858                      | Strand  | +                    |
| Start    | 7971                       | End     | 8527                 |
| Name     | OJ990325_09.9921.C19.o3.gs | Method  | GENSCAN              |
| Start    | 7971                       | End     | 8527                 |
| GI       | none                       | Score   | .73                  |
| Exons    | 7971..8322, 8411..8527     |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22508   | Seq. ID | OJ990325_09.9921.C19 |
| Gene No.    | 46859   | Strand  | -                    |
| Start       | 3905  | End     | 8542                 |
| Name        | OJ990325_09.9921.C19.o2.np  | Method  | AAT/NAP              |
| Start       | 3905  | End     | 8542                 |
| GI          | 6063554   | Score   | 230                  |
| Exons       | 3905..4085, 5683..5711, 6036..6234, 6496..6705, 8498..8542  |         |                      |
| GI Descrip. | (AP000615) ESTs AU075609(C63344),C71850(E0464),C98611(E0464) correspond to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22509  | Seq. ID | OJ990325_09.9921.C21 |
| Gene No.    | 46860  | Strand  | -                    |
| Start       | 1  | End     | 914                  |
| Name        | OJ990325_09.9921.C21.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 914                  |
| GI          | 2498930  | Score   | 532                  |
| Exons       | 1..80, 556..914  |         |                      |
| GI Descrip. | DORSAL-VENTRAL PATTERNING PROTEIN SOG (SHORT GASTRULATION PROTEIN) gi 1203794 (U18774) Sog [Drosophila melanogaster] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22509                      | Seq. ID | OJ990325_09.9921.C21 |
| Gene No. | 46860                      | Strand  | -                    |
| Start    | 1                          | End     | 914                  |
| Name     | OJ990325_09.9921.C21.o1.gs | Method  | GENSCAN              |
| Start    | 388                        | End     | 862                  |
| GI       | none                       | Score   | .51                  |
| Exons    | 388..432, 487..862         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22510  | Seq. ID | OJ990325_09.9921.C22 |
| Gene No.    | 46861  | Strand  | -                    |
| Start       | 178  | End     | 237                  |
| Name        | OJ990325_09.9921.C22.o1.np   | Method  | AAT/NAP              |
| Start       | 178  | End     | 237                  |
| GI          | 2498930  | Score   | 36                   |
| Exons       | 178..237   |         |                      |
| GI Descrip. | DORSAL-VENTRAL PATTERNING PROTEIN SOG (SHORT GASTRULATION PROTEIN) gi 1203794 (U18774) Sog [Drosophila melanogaster] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22510                      | Seq. ID | OJ990325_09.9921.C22 |
| Gene No. | 46862                      | Strand  | -                    |
| Start    | 178                        | End     | 237                  |
| Name     | OJ990325_09.9921.C22.o1.gs | Method  | GENSCAN              |
| Start    | 178                        | End     | 237                  |
| GI       | none                       | Score   | .95                  |

Exons 178..237

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22511  | Seq. ID | OJ990325_09.9921.C23 |
| Gene No.    | 46863  | Strand  | +                    |
| Start       | 1  | End     | 59                   |
| Name        | OJ990325_09.9921.C23.o1.gp                                     | Method  | AAT/GAP              |
| Start       | 1  | End     | 59                   |
| GI          | 2799165  | Score   | 88                   |
| Exons       | 1..59  |         |                      |
| GI Descrip. | 225174/prf  1210248A 2.0e-11 glutelin precursor [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22511                      | Seq. ID | OJ990325_09.9921.C23 |
| Gene No. | 46864                      | Strand  | +                    |
| Start    | 317                        | End     | 1001                 |
| Name     | OJ990325_09.9921.C23.o1.gs | Method  | GENSCAN              |
| Start    | 317                        | End     | 1001                 |
| GI       | none                       | Score   | .45                  |
| Exons    | 317..363, 787..1001        |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22511                                    | Seq. ID | OJ990325_09.9921.C23 |
| Gene No.    | 46865                                    | Strand  | -                    |
| Start       | 1  | End     | 1143                 |
| Name        | OJ990325_09.9921.C23.o1.np               | Method  | AAT/NAP              |
| Start       | 1  | End     | 1143                 |
| GI          | 1684629                                  | Score   | 121                  |
| Exons       | 1..22, 1042..1143                        |         |                      |
| GI Descrip. | (Y09374) lacZ-PhoC [synthetic construct] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22511   | Seq. ID | OJ990325_09.9921.C23 |
| Gene No.    | 46865   | Strand  | -                    |
| Start       | 1   | End     | 1143                 |
| Name        | OJ990325_09.9921.C23.o2.gp  | Method  | AAT/GAP              |
| Start       | 1004  | End     | 1143                 |
| GI          | 2800481   | Score   | 166                  |
| Exons       | 1004..1143  |         |                      |
| GI Descrip. | 4760545/dbj BAA77333.1  4.0e-17 (AB019492) IDN4-GGTR14 [Homo sapiens] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22512   | Seq. ID | OJ990325_09.9921.C25 |
| Gene No.    | 46866   | Strand  | +                    |
| Start       | 331   | End     | 549                  |
| Name        | OJ990325_09.9921.C25.o1.np                      | Method  | AAT/NAP              |
| Start       | 331   | End     | 549                  |
| GI          | 4680186   | Score   | 291                  |
| Exons       | 331..549  |         |                      |
| GI Descrip. | (AF111709) unknown [Oryza sativa subsp. indica] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22512  | Seq. ID | OJ990325_09.9921.C25 |
| Gene No.    | 46867  | Strand  | -                    |
| Start       | 97   | End     | 482                  |
| Name        | OJ990325_09.9921.C25.o1.gp   | Method  | AAT/GAP              |
| Start       | 97   | End     | 482                  |
| GI          | uC-osflcyp033a04b1   | Score   | 637                  |
| Exons       | 97..482  |         |                      |
| GI Descrip. | '6016845/dbj AP000570.1 AP000570 3.0e-59 Oryza sativa genomic DNA, chromosome 1, clone:P0711E10' |         |                      |

Seq. No. 22513  
 Gene No. 46868  
 Start 401  
 Name OJ990325\_09.9921.C26.o1.gs  
 Start 401  
 GI none  
 Exons 401..516

Seq. ID OJ990325\_09.9921.C26  
 Strand +  
 End 516  
 Method GENSCAN  
 End 516  
 Score .8

Seq. No. 22513  
 Gene No. 46869  
 Start 1  
 Name OJ990325\_09.9921.C26.o1.np  
 Start 1  
 GI 5852093  
 Exons 1..21, 686..795  
 GI Descrip. (AL117264) zwh16.1 [Oryza sativa]

Seq. ID OJ990325\_09.9921.C26  
 Strand -  
 End 795  
 Method AAT/NAP  
 End 795  
 Score 67

Seq. No. 22514  
 Gene No. 46870  
 Start 167  
 Name OJ990325\_09.9921.C27.o1.gs  
 Start 167  
 GI none  
 Exons 167..252, 331..428, 534..656, 693..854

Seq. ID OJ990325\_09.9921.C27  
 Strand +  
 End 854  
 Method GENSCAN  
 End 854  
 Score .5

Seq. No. 22515  
 Gene No. 46871  
 Start 20  
 Name OJ990325\_09.9921.C29.o1.gs  
 Start 20  
 GI none  
 Exons 20..324, 331..396

Seq. ID OJ990325\_09.9921.C29  
 Strand -  
 End 396  
 Method GENSCAN  
 End 396  
 Score .7

Seq. No. 22516  
 Gene No. 46872  
 Start 25  
 Name OJ990325\_09.9921.C30.o1.gs  
 Start 25  
 GI none  
 Exons 25..63, 195..280, 370..424

Seq. ID OJ990325\_09.9921.C30  
 Strand +  
 End 424  
 Method GENSCAN  
 End 424  
 Score .71

Seq. No. 22516  
 Gene No. 46873  
 Start 1002  
 Name OJ990325\_09.9921.C30.o2.gs  
 Start 1002  
 GI none  
 Exons 1002..1201, 1852..1951

Seq. ID OJ990325\_09.9921.C30  
 Strand -  
 End 1951  
 Method GENSCAN  
 End 1951  
 Score .4

Seq. No. 22517  
 Gene No. 46874  
 Start 1196  
 Name OJ990325\_09.9921.C31.o1.gs  
 Start 1196  
 GI none  
 Exons 1196..1408

Seq. ID OJ990325\_09.9921.C31  
 Strand -  
 End 1408  
 Method GENSCAN  
 End 1408  
 Score .42

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22518                      | Seq. ID | OJ990325_09.9921.C32 |
| Gene No. | 46875                      | Strand  | +                    |
| Start    | 376                        | End     | 1139                 |
| Name     | OJ990325_09.9921.C32.ol.gs | Method  | GENSCAN              |
| Start    | 376                        | End     | 1139                 |
| GI       | none                       | Score   | .5                   |
| Exons    | 376..470, 1019..1139       |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22519                                       | Seq. ID | OJ990325_09.9921.C33 |
| Gene No.    | 46876                                       | Strand  | -                    |
| Start       | 1   | End     | 780                  |
| Name        | OJ990325_09.9921.C33.ol.np                  | Method  | AAT/NAP              |
| Start       | 1   | End     | 780                  |
| GI          | 5902444                                     | Score   | 467                  |
| Exons       | 1..780                                      |         |                      |
| GI Descrip. | (AB030283) GAG-POL precursor [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22519                      | Seq. ID | OJ990325_09.9921.C33 |
| Gene No. | 46876                      | Strand  | -                    |
| Start    | 1                          | End     | 780                  |
| Name     | OJ990325_09.9921.C33.ol.tw | Method  | TBLASTX:Wheat        |
| Start    | 2                          | End     | 292                  |
| GI       | none                       | Score   | 80                   |
| Exons    | 2..73, 110..292, 111..284  |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22520   | Seq. ID | OJ990325_09.9921.C34 |
| Gene No.    | 46877   | Strand  | +                    |
| Start       | 1   | End     | 773                  |
| Name        | OJ990325_09.9921.C34.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 773                  |
| GI          | 6498441   | Score   | 489                  |
| Exons       | 1..203, 258..773  |         |                      |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22520                       | Seq. ID | OJ990325_09.9921.C34 |
| Gene No. | 46877                       | Strand  | +                    |
| Start    | 1                           | End     | 773                  |
| Name     | OJ990325_09.9921.C34.ol.gs  | Method  | GENSCAN              |
| Start    | 62                          | End     | 707                  |
| GI       | none                        | Score   | .78                  |
| Exons    | 62..226, 395..560, 691..707 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22520                                  | Seq. ID | OJ990325_09.9921.C34 |
| Gene No. | 46877                                  | Strand  | +                    |
| Start    | 1                                      | End     | 773                  |
| Name     | OJ990325_09.9921.C34.ol.tw             | Method  | TBLASTX:Wheat        |
| Start    | 350                                    | End     | 773                  |
| GI       | none                                   | Score   | 131                  |
| Exons    | 350..487, 358..480, 470..772, 492..773 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22520                      | Seq. ID | OJ990325_09.9921.C34 |
| Gene No. | 46877                      | Strand  | +                    |
| Start    | 1                          | End     | 773                  |
| Name     | OJ990325_09.9921.C34.ol.tm | Method  | TBLASTX:Maize        |
| Start    | 486                        | End     | 770                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| GI          | none  | Score   | 321                  |
| Exons       | 486..770, 542..748  |         |                      |
| Seq. No.    | 22521   | Seq. ID | OJ990325_09.9921.C35 |
| Gene No.    | 46878   | Strand  | +                    |
| Start       | 1   | End     | 599                  |
| Name        | OJ990325_09.9921.C35.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 599                  |
| GI          | 5902445   | Score   | 363                  |
| Exons       | 1..319, 359..599  |         |                      |
| GI Descrip. | (AB030283) GAG-POL precursor [Oryza sativa]   |         |                      |
| Seq. No.    | 22521   | Seq. ID | OJ990325_09.9921.C35 |
| Gene No.    | 46878   | Strand  | +                    |
| Start       | 1   | End     | 599                  |
| Name        | OJ990325_09.9921.C35.ol.tw  | Method  | TBLASTX:Wheat        |
| Start       | 12  | End     | 317                  |
| GI          | none  | Score   | 192                  |
| Exons       | 12..317, 59..199  |         |                      |
| Seq. No.    | 22521   | Seq. ID | OJ990325_09.9921.C35 |
| Gene No.    | 46878   | Strand  | +                    |
| Start       | 1   | End     | 599                  |
| Name        | OJ990325_09.9921.C35.ol.gs  | Method  | GENSCAN              |
| Start       | 160   | End     | 548                  |
| GI          | none  | Score   | .48                  |
| Exons       | 160..548  |         |                      |
| Seq. No.    | 22522   | Seq. ID | OJ990325_09.9921.C36 |
| Gene No.    | 46879   | Strand  | +                    |
| Start       | 183   | End     | 608                  |
| Name        | OJ990325_09.9921.C36.ol.gs  | Method  | GENSCAN              |
| Start       | 183   | End     | 608                  |
| GI          | none  | Score   | .58                  |
| Exons       | 183..263, 345..476, 576..608  |         |                      |
| Seq. No.    | 22523   | Seq. ID | OJ990325_09.9921.C37 |
| Gene No.    | 46880   | Strand  | +                    |
| Start       | 1   | End     | 756                  |
| Name        | OJ990325_09.9921.C37.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 756                  |
| GI          | 6815072   | Score   | 684                  |
| Exons       | 1..756  |         |                      |
| GI Descrip. | (AP001080) Similar to Arabidopsis thaliana chromosome II BAC T13P21; hypothetical protein (AC006067) [Oryza sativa] |         |                      |
| Seq. No.    | 22523   | Seq. ID | OJ990325_09.9921.C37 |
| Gene No.    | 46880   | Strand  | +                    |
| Start       | 1   | End     | 756                  |
| Name        | OJ990325_09.9921.C37.ol.gs  | Method  | GENSCAN              |
| Start       | 101   | End     | 472                  |
| GI          | none  | Score   | .55                  |
| Exons       | 101..472  |         |                      |
| Seq. No.    | 22523   | Seq. ID | OJ990325_09.9921.C37 |
| Gene No.    | 46880   | Strand  | +                    |
| Start       | 1   | End     | 756                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Name        | OJ990325_09.9921.C37.ol.tm  | Method  | TBLASTX:Maize        |
| Start       | 437   | End     | 754                  |
| GI          | none  | Score   | 234                  |
| Exons       | 437..754, 440..721, 454..726  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22524   | Seq. ID | OJ990325_09.9921.C40 |
| Gene No.    | 46881   | Strand  | +                    |
| Start       | 1   | End     | 585                  |
| Name        | OJ990325_09.9921.C40.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 585                  |
| GI          | 6815072   | Score   | 441                  |
| Exons       | 1..400, 560..585  |         |                      |
| GI Descrip. | (AP001080) Similar to Arabidopsis thaliana chromosome II BAC T13P21; hypothetical protein (AC006067) [Oryza sativa] |         |                      |
|             |   |         |                      |
| Seq. No.    | 22524   | Seq. ID | OJ990325_09.9921.C40 |
| Gene No.    | 46881   | Strand  | +                    |
| Start       | 1   | End     | 585                  |
| Name        | OJ990325_09.9921.C40.ol.tw  | Method  | TBLASTX:Wheat        |
| Start       | 40  | End     | 383                  |
| GI          | none  | Score   | 193                  |
| Exons       | 40..291, 183..290, 288..383, 289..369   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22524   | Seq. ID | OJ990325_09.9921.C40 |
| Gene No.    | 46881   | Strand  | +                    |
| Start       | 1   | End     | 585                  |
| Name        | OJ990325_09.9921.C40.ol.tm  | Method  | TBLASTX:Maize        |
| Start       | 85  | End     | 390                  |
| GI          | none  | Score   | 157                  |
| Exons       | 85..276, 174..275, 288..389, 289..390   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22524   | Seq. ID | OJ990325_09.9921.C40 |
| Gene No.    | 46881   | Strand  | +                    |
| Start       | 1   | End     | 585                  |
| Name        | OJ990325_09.9921.C40.ol.gs  | Method  | GENSCAN              |
| Start       | 97  | End     | 400                  |
| GI          | none  | Score   | .93                  |
| Exons       | 97..400   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22525   | Seq. ID | OJ990325_09.9921.C41 |
| Gene No.    | 46882   | Strand  | -                    |
| Start       | 1   | End     | 412                  |
| Name        | OJ990325_09.9921.C41.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 412                  |
| GI          | 4680179   | Score   | 440                  |
| Exons       | 1..412  |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica]   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22525   | Seq. ID | OJ990325_09.9921.C41 |
| Gene No.    | 46882   | Strand  | -                    |
| Start       | 1   | End     | 412                  |
| Name        | OJ990325_09.9921.C41.ol.gs  | Method  | GENSCAN              |
| Start       | 89  | End     | 310                  |
| GI          | none  | Score   | .82                  |
| Exons       | 89..310   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22526   | Seq. ID | OJ990325_09.9921.C42 |

|             |   |        |         |
|-------------|---|--------|---------|
| Gene No.    | 46883   | Strand | -       |
| Start       | 1   | End    | 576     |
| Name        | OJ990325_09.9921.C42.o1.np  | Method | AAT/NAP |
| Start       | 1   | End    | 576     |
| GI          | 6721561   | Score  | 669     |
| Exons       | 1..576  |        |         |
| GI Descrip. | (AP001073) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]<br>gi 6815086 dbj BAA90372.1  (AP001081) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa] |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22526                      | Seq. ID | OJ990325_09.9921.C42 |
| Gene No. | 46883                      | Strand  | -                    |
| Start    | 1                          | End     | 576                  |
| Name     | OJ990325_09.9921.C42.o1.gs | Method  | GENSCAN              |
| Start    | 50                         | End     | 355                  |
| GI       | none                       | Score   | .67                  |
| Exons    | 50..355                    |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22527   | Seq. ID | OJ990325_09.9921.C43 |
| Gene No.    | 46884   | Strand  | -                    |
| Start       | 1   | End     | 1299                 |
| Name        | OJ990325_09.9921.C43.o2.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 628                  |
| GI          | 6721558   | Score   | 123                  |
| Exons       | 1..71, 526..628   |         |                      |
| GI Descrip. | (AP001073) hypothetical protein [Oryza sativa]<br>gi 6815083 dbj BAA90369.1  (AP001081) hypothetical protein [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22527                                    | Seq. ID | OJ990325_09.9921.C43 |
| Gene No. | 46884                                    | Strand  | -                    |
| Start    | 1  | End     | 1299                 |
| Name     | OJ990325_09.9921.C43.o1.gs               | Method  | GENSCAN              |
| Start    | 104                                      | End     | 1299                 |
| GI       | none                                     | Score   | .65                  |
| Exons    | 104..223, 245..372, 529..669, 1213..1299 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22528   | Seq. ID | OJ990325_09.9921.C44 |
| Gene No.    | 46885   | Strand  | +                    |
| Start       | 1   | End     | 1702                 |
| Name        | OJ990325_09.9921.C44.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1702                 |
| GI          | 6069646   | Score   | 751                  |
| Exons       | 1..524, 1594..1702  |         |                      |
| GI Descrip. | (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi 6907112 dbj BAA90639.1  (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22528                      | Seq. ID | OJ990325_09.9921.C44 |
| Gene No. | 46885                      | Strand  | +                    |
| Start    | 1                          | End     | 1702                 |
| Name     | OJ990325_09.9921.C44.o2.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 1684                 |



GI 4680186 Score 254  
 Exons 1..39, 584..637, 1479..1684  
 GI Descrip. (AF111709) unknown [Oryza sativa subsp. indica]

Seq. No. 22528 Seq. ID OJ990325\_09.9921.C44  
 Gene No. 46886 Strand -  
 Start 4 End 1613  
 Name OJ990325\_09.9921.C44.o1.gs Method GENSCAN  
 Start 4 End 1508  
 GI none Score .57  
 Exons 4..416, 1276..1321, 1443..1508

Seq. No. 22528 Seq. ID OJ990325\_09.9921.C44  
 Gene No. 46886 Strand -  
 Start 4 End 1613  
 Name OJ990325\_09.9921.C44.o1.tm Method TBLASTX:Maize  
 Start 130 End 462  
 GI none Score 271  
 Exons 130..462, 249..374

Seq. No. 22528 Seq. ID OJ990325\_09.9921.C44  
 Gene No. 46886 Strand -  
 Start 4 End 1613  
 Name OJ990325\_09.9921.C44.o1.tw Method TBLASTX:Wheat  
 Start 223 End 417  
 GI none Score 197  
 Exons 223..417, 252..374

Seq. No. 22528 Seq. ID OJ990325\_09.9921.C44  
 Gene No. 46886 Strand -  
 Start 4 End 1613  
 Name OJ990325\_09.9921.C44.o1.gp Method AAT/GAP  
 Start 1228 End 1613  
 GI uC-osflcyp033a04b1 Score 649  
 Exons 1228..1613  
 GI Descrip. '6016845/dbj|AP000570.1|AP000570 3.0e-59 Oryza sativa genomic  
 DNA, chromosome 1, clone:P0711E10'

Seq. No. 22529 Seq. ID OJ990325\_09.9921.C45  
 Gene No. 46887 Strand -  
 Start 1 End 114  
 Name OJ990325\_09.9921.C45.o1.gp Method AAT/GAP  
 Start 1 End 114  
 GI none Score 224  
 Exons 1..114

Seq. No. 22530 Seq. ID OJ990325\_09.9921.C47  
 Gene No. 46888 Strand +  
 Start 127 End 237  
 Name OJ990325\_09.9921.C47.o1.gs Method GENSCAN  
 Start 127 End 237  
 GI none Score .73  
 Exons 127..237

Seq. No. 22531 Seq. ID OJ990325\_09.9921.C48  
 Gene No. 46889 Strand +  
 Start 391 End 634

|       |  |        |               |
|-------|--|--------|---------------|
| Name  | OJ990325_09.9921.C48.ol.tm             | Method | TBLASTX:Maize |
| Start | 364                                    | End    | 630           |
| GI    | none                                   | Score  | 257           |
| Exons | 364..576, 374..589, 385..630, 522..623 |        |               |

  

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22531   | Seq. ID | OJ990325_09.9921.C48 |
| Gene No.    | 46889   | Strand  | +                    |
| Start       | 391   | End     | 634                  |
| Name        | OJ990325_09.9921.C48.ol.np  | Method  | AAT/NAP              |
| Start       | 391   | End     | 634                  |
| GI          | 3157943   | Score   | 100                  |
| Exons       | 391..634  |         |                      |
| GI Descrip. | (AC002131) Contains similarity to BAP31 protein gb X81816 from Mus musculus. [Arabidopsis thaliana] |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22532  | Seq. ID | OJ990325_09.9921.C50 |
| Gene No.    | 46890  | Strand  | -                    |
| Start       | 245  | End     | 463                  |
| Name        | OJ990325_09.9921.C50.ol.gp   | Method  | AAT/GAP              |
| Start       | 209  | End     | 453                  |
| GI          | 40964_1.R1084  | Score   | 436                  |
| Exons       | 209..453   |         |                      |
| GI Descrip. | '5734768/gb AAD50033.1 AC007651_28 5.0e-80 (AC007651) Hypothetical Protein [Arabidopsis thaliana]' |         |                      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22532                      | Seq. ID | OJ990325_09.9921.C50 |
| Gene No. | 46890                      | Strand  | -                    |
| Start    | 245                        | End     | 463                  |
| Name     | OJ990325_09.9921.C50.ol.gs | Method  | GENSCAN              |
| Start    | 245                        | End     | 463                  |
| GI       | none                       | Score   | .79                  |
| Exons    | 245..463                   |         |                      |

  

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22532  | Seq. ID | OJ990325_09.9921.C50 |
| Gene No. | 46890  | Strand  | -                    |
| Start    | 245  | End     | 463                  |
| Name     | OJ990325_09.9921.C50.ol.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 310  | End     | 457                  |
| GI       | none   | Score   | 75                   |
| Exons    | 310..375, 317..385, 333..377, 368..457, 373..453, 383..454 |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22532  | Seq. ID | OJ990325_09.9921.C50 |
| Gene No.    | 46890  | Strand  | -                    |
| Start       | 245  | End     | 463                  |
| Name        | OJ990325_09.9921.C50.ol.np                             | Method  | AAT/NAP              |
| Start       | 322  | End     | 455                  |
| GI          | 5734768  | Score   | 124                  |
| Exons       | 322..455   |         |                      |
| GI Descrip. | (AC007651) Hypothetical Protein [Arabidopsis thaliana] |         |                      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22533                      | Seq. ID | OJ990325_09.9921.C51 |
| Gene No. | 46891                      | Strand  | +                    |
| Start    | 1                          | End     | 286                  |
| Name     | OJ990325_09.9921.C51.ol.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 286                  |
| GI       | 3522942                    | Score   | 56                   |
| Exons    | 1..43, 210..286            |         |                      |

GI Descrip. (AC004411) unknown protein [Arabidopsis thaliana]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22533                      | Seq. ID | OJ990325_09.9921.C51 |
| Gene No. | 46891                      | Strand  | +                    |
| Start    | 1                          | End     | 286                  |
| Name     | OJ990325_09.9921.C51.o1.gs | Method  | GENSCAN              |
| Start    | 106                        | End     | 264                  |
| GI       | none                       | Score   | .76                  |
| Exons    | 106..264                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22534                      | Seq. ID | OJ990325_09.9921.C52 |
| Gene No. | 46892                      | Strand  | +                    |
| Start    | 292                        | End     | 484                  |
| Name     | OJ990325_09.9921.C52.o1.gs | Method  | GENSCAN              |
| Start    | 292                        | End     | 484                  |
| GI       | none                       | Score   | .76                  |
| Exons    | 292..484                   |         |                      |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22535  | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46893  | Strand  | +                   |
| Start    | 110  | End     | 3960                |
| Name     | OJ990515_23.9A07.C2.o1.gs                                | Method  | GENSCAN             |
| Start    | 110  | End     | 3960                |
| GI       | none   | Score   | 1                   |
| Exons    | 110..495, 1501..1660, 2007..2183, 3309..3390, 3521..3960 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22535  | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No.    | 46893  | Strand  | +                   |
| Start       | 110  | End     | 3960                |
| Name        | OJ990515_23.9A07.C2.o1.np                                | Method  | AAT/NAP             |
| Start       | 110  | End     | 3954                |
| GI          | 2244806  | Score   | 943                 |
| Exons       | 110..491, 1524..1660, 2007..2186, 2255..2374, 3516..3954 |         |                     |
| GI Descrip. | (Z97336) hypothetical protein [Arabidopsis thaliana]     |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22535                     | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46893                     | Strand  | +                   |
| Start    | 110                       | End     | 3960                |
| Name     | OJ990515_23.9A07.C2.o1.gp | Method  | AAT/GAP             |
| Start    | 989                       | End     | 1440                |
| GI       | 4879172                   | Score   | 804                 |
| Exons    | 989..1440                 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22535  | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No.    | 46893  | Strand  | +                   |
| Start       | 110  | End     | 3960                |
| Name        | OJ990515_23.9A07.C2.o2.gp  | Method  | AAT/GAP             |
| Start       | 3323   | End     | 3900                |
| GI          | 3763435  | Score   | 829                 |
| Exons       | 3323..3390, 3521..3900   |         |                     |
| GI Descrip. | 2244806/emb CAB10229.1  9.0e-28 (Z97336) hypothetical protein [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22535                     | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46894                     | Strand  | +                   |
| Start    | 3994                      | End     | 4307                |
| Name     | OJ990515_23.9A07.C2.o3.gp | Method  | AAT/GAP             |

|       |            |       |      |
|-------|------------|-------|------|
| Start | 3994       | End   | 4307 |
| GI    | 3763436    | Score | 517  |
| Exons | 3994..4307 |       |      |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22535  | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46895  | Strand  | +                   |
| Start    | 4399   | End     | 8166                |
| Name     | OJ990515_23.9A07.C2.o2.gs  | Method  | GENSCAN             |
| Start    | 4399   | End     | 8103                |
| GI       | none   | Score   | .79                 |
| Exons    | 4399..4481, 5067..5163, 6091..6128, 6247..6853, 6931..7435, 7553..8103 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22535  | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No.    | 46895  | Strand  | +                   |
| Start       | 4399   | End     | 8166                |
| Name        | OJ990515_23.9A07.C2.o2.np  | Method  | AAT/NAP             |
| Start       | 5909   | End     | 8166                |
| GI          | 3450842  | Score   | 1267                |
| Exons       | 5909..6001, 6091..6128, 6247..6853, 6931..7111, 7165..7429, 7553..7752, 7813..8166 |         |                     |
| GI Descrip. | (AF080436) mitogen activated protein kinase kinase [Oryza sativa]                  |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22535   | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No.    | 46895   | Strand  | +                   |
| Start       | 4399  | End     | 8166                |
| Name        | OJ990515_23.9A07.C2.o4.gp   | Method  | AAT/GAP             |
| Start       | 7548  | End     | 7888                |
| GI          | 701181  | Score   | 630                 |
| Exons       | 7548..7888  |         |                     |
| GI Descrip. | 3450842 1.0e-15 (AF080436) mitogen activated protein kinase kinase [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22535  | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No.    | 46896  | Strand  | +                   |
| Start       | 8118   | End     | 8622                |
| Name        | OJ990515_23.9A07.C2.o5.gp  | Method  | AAT/GAP             |
| Start       | 8118   | End     | 8622                |
| GI          | LIB3434-038-P1-K1-E8   | Score   | 869                 |
| Exons       | 8118..8622   |         |                     |
| GI Descrip. | '2244806/emb CAB10229.1  9.0e-28 (Z97336) hypothetical protein [Arabidopsis thaliana]' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22535                     | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897                     | Strand  | -                   |
| Start    | 11764                     | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o3.tc | Method  | TBLASTX:Cress       |
| Start    | 98                        | End     | 385                 |
| GI       | none                      | Score   | 242                 |
| Exons    | 98..313, 308..385         |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22535                     | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897                     | Strand  | -                   |
| Start    | 11764                     | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o2.tm | Method  | TBLASTX:Maize       |
| Start    | 106                       | End     | 3965                |

|       |   |       |     |
|-------|---|-------|-----|
| GI    | none  | Score | 426 |
| Exons | 106..267, 107..397, 334..372, 1499..1660, 1502..1675,<br>1509..1661, 1991..2182, 2001..2183, 2010..2183, 2272..2355,<br>2274..2369, 2276..2359, 2289..2369, 3306..3389, 3308..3388,<br>3511..3954, 3513..3965 |       |     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22535   | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897   | Strand  | -                   |
| Start    | 11764   | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o2.ts   | Method  | TBLASTX:Soybean     |
| Start    | 137   | End     | 3750                |
| GI       | none  | Score   | 118                 |
| Exons    | 137..256, 1565..1660, 2001..2183, 2010..2183, 2266..2355,<br>2276..2359, 3306..3389, 3308..3394, 3499..3750, 3555..3740 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22535   | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897   | Strand  | -                   |
| Start    | 11764   | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o2.tc   | Method  | TBLASTX:Cress       |
| Start    | 1577  | End     | 3663                |
| GI       | none  | Score   | 79                  |
| Exons    | 1577..1660, 2001..2183, 2010..2183, 2266..2355, 2276..2359,<br>3306..3389, 3308..3388, 3511..3663, 3519..3644 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22535   | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897   | Strand  | -                   |
| Start    | 11764   | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o5.tc   | Method  | TBLASTX:Cress       |
| Start    | 5966  | End     | 6442                |
| GI       | none  | Score   | 63                  |
| Exons    | 5966..6001, 5980..6000, 6088..6129, 6093..6128, 6248..6442,<br>6250..6294, 6272..6442 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22535   | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897   | Strand  | -                   |
| Start    | 11764   | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 6247  | End     | 6999                |
| GI       | none  | Score   | 375                 |
| Exons    | 6247..6294, 6248..6661, 6272..6448, 6430..6639, 6692..6853,<br>6694..6852, 6930..6986, 6931..6999 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22535   | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897   | Strand  | -                   |
| Start    | 11764   | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o1.ts   | Method  | TBLASTX:Soybean     |
| Start    | 6247  | End     | 6999                |
| GI       | none  | Score   | 375                 |
| Exons    | 6247..6294, 6248..6661, 6272..6448, 6430..6639, 6692..6853,<br>6694..6852, 6930..6986, 6931..6999 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22535                     | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897                     | Strand  | -                   |
| Start    | 11764                     | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o1.tc | Method  | TBLASTX:Cress       |
| Start    | 6541                      | End     | 6856                |
| GI       | none                      | Score   | 457                 |

Exons 6541..6639, 6542..6856, 6688..6855

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22535  | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897  | Strand  | -                   |
| Start    | 11764  | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o4.tc                                  | Method  | TBLASTX:Cress       |
| Start    | 6946   | End     | 7947                |
| GI       | none   | Score   | 65                  |
| Exons    | 6946..6999, 7339..7431, 7359..7430, 7552..7713, 7906..7947 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22535                     | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897                     | Strand  | -                   |
| Start    | 11764                     | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o3.ts | Method  | TBLASTX:Soybean     |
| Start    | 7354                      | End     | 7713                |
| GI       | none                      | Score   | 102                 |
| Exons    | 7354..7431, 7552..7713    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22535  | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897  | Strand  | -                   |
| Start    | 11764  | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 7554   | End     | 8052                |
| GI       | none   | Score   | 197                 |
| Exons    | 7554..7712, 7555..7713, 7813..7872, 7827..7871, 7903..8052, 7905..8036, 7924..8052 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22535                      | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897                      | Strand  | -                   |
| Start    | 11764                      | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o6.gp  | Method  | AAT/GAP             |
| Start    | 11634                      | End     | 12488               |
| GI       | 568027                     | Score   | 770                 |
| Exons    | 11634..11877, 12326..12488 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22535  | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897  | Strand  | -                   |
| Start    | 11764  | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 11748  | End     | 13646               |
| GI       | none   | Score   | 85                  |
| Exons    | 11748..11849, 11761..11886, 11765..11887, 12323..12391, 12327..12410, 12329..12388, 12439..12492, 12443..12508, 12446..12511, 12745..12849, 12747..12857, 12753..12851, 13362..13478, 13363..13482, 13364..13480, 13538..13642, 13542..13646, 13545..13640, 13549..13641, 13550..13642 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22535  | Seq. ID | OJ990515_23.9A07.C2 |
| Gene No. | 46897  | Strand  | -                   |
| Start    | 11764  | End     | 14985               |
| Name     | OJ990515_23.9A07.C2.o3.gs  | Method  | GENSCAN             |
| Start    | 11764  | End     | 14985               |
| GI       | none   | Score   | .94                 |
| Exons    | 11764..11877, 12326..12509, 12746..12848, 13362..13479, 14090..14150, 14804..14985 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22535 | Seq. ID | OJ990515_23.9A07.C2 |
|----------|-------|---------|---------------------|

Gene No. 46897 Strand -  
 Start 11764 End 14985  
 Name OJ990515\_23.9A07.C2.o3.np Method AAT/NAP  
 Start 11764 End 13639  
 GI 6225596 Score 98  
 Exons 11764..11868, 12326..12498, 12738..12848, 13362..13464,  
 13547..13639  
 GI Descrip. ATP-DEPENDENT DNA HELICASE II, 70 KD SUBUNIT (KU AUTOANTIGEN  
 PROTEIN P70 HOMOLOG) (KU70) gi|3374509|dbj|BAA32018| (AB016529)  
 Ku70 [Gallus gallus]

Seq. No. 22536 Seq. ID OJ990515\_23.9A07.C3  
 Gene No. 46898 Strand +  
 Start 109 End 982  
 Name OJ990515\_23.9A07.C3.o1.gs Method GENSCAN  
 Start 109 End 982  
 GI none Score .71  
 Exons 109..186, 299..409, 968..982

Seq. No. 22536 Seq. ID OJ990515\_23.9A07.C3  
 Gene No. 46899 Strand -  
 Start 980 End 6786  
 Name OJ990515\_23.9A07.C3.o1.np Method AAT/NAP  
 Start 980 End 4878  
 GI 6225596 Score 99  
 Exons 980..1000, 2658..2838, 3077..3188, 3411..3556, 4136..4194,  
 4265..4348, 4467..4569, 4820..4878  
 GI Descrip. ATP-DEPENDENT DNA HELICASE II, 70 KD SUBUNIT (KU AUTOANTIGEN  
 PROTEIN P70 HOMOLOG) (KU70) gi|3374509|dbj|BAA32018| (AB016529)  
 Ku70 [Gallus gallus]

Seq. No. 22536 Seq. ID OJ990515\_23.9A07.C3  
 Gene No. 46899 Strand -  
 Start 980 End 6786  
 Name OJ990515\_23.9A07.C3.o2.gs Method GENSCAN  
 Start 2580 End 6786  
 GI none Score .83  
 Exons 2580..2764, 3423..3556, 4185..4348, 4452..4569, 4820..4925,  
 5606..5720, 6223..6339, 6552..6701, 6724..6786

Seq. No. 22536 Seq. ID OJ990515\_23.9A07.C3  
 Gene No. 46900 Strand -  
 Start 7528 End 12155  
 Name OJ990515\_23.9A07.C3.o1.tm Method TBLASTX:Maize  
 Start 2691 End 4568  
 GI none Score 146  
 Exons 2691..2834, 2692..2838, 2692..2835, 2693..2836, 3063..3155,  
 3072..3155, 3076..3177, 3077..3157, 3275..3322, 3276..3323,  
 3419..3490, 3422..3556, 3427..3552, 3435..3560, 4135..4188,  
 4135..4194, 4263..4349, 4264..4353, 4264..4350, 4265..4351,  
 4452..4568, 4455..4565

Seq. No. 22536 Seq. ID OJ990515\_23.9A07.C3  
 Gene No. 46900 Strand -  
 Start 7528 End 12155  
 Name OJ990515\_23.9A07.C3.o3.gs Method GENSCAN  
 Start 7528 End 12155

GI none Score .72  
Exons 7528..8961, 9085..9535, 9917..9934, 10305..10388, 10415..10616, 11581..11647, 12105..12155

Seq. No. 22536 Seq. ID OJ990515\_23.9A07.C3  
Gene No. 46900 Strand -  
Start 7528 End 12155  
Name OJ990515\_23.9A07.C3.o2.np Method AAT/NAP  
Start 7563 End 8544  
GI 2980893 Score 441  
Exons 7563..8168, 8302..8544  
GI Descrip. (D87065) histone H1 [Triticum aestivum]

Seq. No. 22536 Seq. ID OJ990515\_23.9A07.C3  
Gene No. 46900 Strand -  
Start 7528 End 12155  
Name OJ990515\_23.9A07.C3.o1.gp Method AAT/GAP  
Start 7635 End 8643  
GI 6443\_2.R1084 Score 1170  
Exons 7635..7676, 7876..8168, 8302..8643  
GI Descrip. '121950/sp|P23444|H1\_MAIZE 2.0e-12 HISTONE H1  
>gi\_22321\_emb\_CAA40362\_ (X57077) H1 histone [Zea mays]'

Seq. No. 22537 Seq. ID OJ990515\_23.9A07.C4  
Gene No. 46901 Strand +  
Start 139 End 764  
Name OJ990515\_23.9A07.C4.o1.gs Method GENSCAN  
Start 139 End 764  
GI none Score .69  
Exons 139..209, 473..764

Seq. No. 22538 Seq. ID OJ990515\_23.9A07.C5  
Gene No. 46902 Strand -  
Start 1 End 445  
Name OJ990515\_23.9A07.C5.o1.np Method AAT/NAP  
Start 1 End 445  
GI 5734635 Score 152  
Exons 1..445  
GI Descrip. (AP000391) hypothetical protein [Oryza sativa]

Seq. No. 22538 Seq. ID OJ990515\_23.9A07.C5  
Gene No. 46902 Strand -  
Start 1 End 445  
Name OJ990515\_23.9A07.C5.o1.gs Method GENSCAN  
Start 66 End 162  
GI none Score .55  
Exons 66..162

Seq. No. 22539 Seq. ID OJ990515\_23.9A07.C6  
Gene No. 46903 Strand +  
Start 1 End 2566  
Name OJ990515\_23.9A07.C6.o1.np Method AAT/NAP  
Start 1 End 2557  
GI 3132825 Score 2287  
Exons 1..29, 148..312, 397..592, 683..794, 882..1029, 1144..1341, 1437..1715, 1811..1972, 2071..2289, 2403..2557  
GI Descrip. (AF063403) putative cytosine-5 DNA methyltransferase [Zea mays]



|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22539  | Seq. ID | OJ990515_23.9A07.C6 |
| Gene No. | 46903  | Strand  | +                   |
| Start    | 1  | End     | 2566                |
| Name     | OJ990515_23.9A07.C6.o1.tc  | Method  | TBLASTX:Cress       |
| Start    | 145  | End     | 2531                |
| GI       | none   | Score   | 131                 |
| Exons    | 145..315, 150..314, 388..597, 519..593, 670..795, 672..791, 682..792, 876..1028, 880..1029, 880..1029, 890..1033, 1140..1346, 1141..1347, 1144..1344, 1434..1694, 1436..1558, 1436..1702, 1437..1703, 1804..2028, 1808..1975, 1999..2289, 2070..2288, 2102..2290, 2104..2307, 2123..2305, 2394..2477, 2399..2479, 2400..2531, 2401..2478, 2402..2515 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22539   | Seq. ID | OJ990515_23.9A07.C6 |
| Gene No. | 46903   | Strand  | +                   |
| Start    | 1   | End     | 2566                |
| Name     | OJ990515_23.9A07.C6.o1.gs   | Method  | GENSCAN             |
| Start    | 148   | End     | 2537                |
| GI       | none  | Score   | .85                 |
| Exons    | 148..312, 397..592, 683..794, 882..1029, 1437..1715, 1811..1972, 2041..2161, 2204..2289, 2403..2537 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22539  | Seq. ID | OJ990515_23.9A07.C6 |
| Gene No. | 46903  | Strand  | +                   |
| Start    | 1  | End     | 2566                |
| Name     | OJ990515_23.9A07.C6.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 181  | End     | 811                 |
| GI       | none   | Score   | 173                 |
| Exons    | 181..315, 182..301, 388..453, 391..441, 438..602, 439..603, 670..795, 681..794, 683..811 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22539   | Seq. ID | OJ990515_23.9A07.C6 |
| Gene No. | 46903   | Strand  | +                   |
| Start    | 1   | End     | 2566                |
| Name     | OJ990515_23.9A07.C6.o1.ts   | Method  | TBLASTX:Soybean     |
| Start    | 703   | End     | 1522                |
| GI       | none  | Score   | 135                 |
| Exons    | 703..795, 705..800, 876..1025, 880..1029, 880..1029, 1143..1334, 1144..1344, 1145..1342, 1433..1522, 1437..1517 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22539   | Seq. ID | OJ990515_23.9A07.C6 |
| Gene No. | 46903   | Strand  | +                   |
| Start    | 1   | End     | 2566                |
| Name     | OJ990515_23.9A07.C6.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 882   | End     | 2534                |
| GI       | none  | Score   | 228                 |
| Exons    | 882..1028, 883..1029, 883..1029, 1132..1341, 1144..1344, 1436..1714, 1437..1703, 1697..1972, 1805..1975, 1810..2022, 2068..2289, 2070..2291, 2070..2285, 2089..2310, 2399..2521, 2400..2534, 2400..2522 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22539                     | Seq. ID | OJ990515_23.9A07.C6 |
| Gene No. | 46903                     | Strand  | +                   |
| Start    | 1                         | End     | 2566                |
| Name     | OJ990515_23.9A07.C6.o3.ts | Method  | TBLASTX:Soybean     |
| Start    | 1527                      | End     | 1918                |

|       |  |       |     |
|-------|--|-------|-----|
| GI    | none   | Score | 226 |
| Exons | 1527..1703, 1529..1696, 1805..1858, 1805..1873, 1835..1918, 1868..1918 |       |     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22539  | Seq. ID | OJ990515_23.9A07.C6 |
| Gene No. | 46903  | Strand  | +                   |
| Start    | 1  | End     | 2566                |
| Name     | OJ990515_23.9A07.C6.o2.ts                      | Method  | TBLASTX:Soybean     |
| Start    | 1949   | End     | 2267                |
| GI       | none   | Score   | 43                  |
| Exons    | 1949..1975, 2068..2265, 2068..2259, 2073..2267 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22539  | Seq. ID | OJ990515_23.9A07.C6 |
| Gene No. | 46903  | Strand  | +                   |
| Start    | 1  | End     | 2566                |
| Name     | OJ990515_23.9A07.C6.o1.tw                                  | Method  | TBLASTX:Wheat       |
| Start    | 2086   | End     | 2566                |
| GI       | none   | Score   | 371                 |
| Exons    | 2086..2307, 2095..2289, 2400..2528, 2402..2566, 2402..2524 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22540                     | Seq. ID | OJ990515_23.9A07.C7 |
| Gene No. | 46904                     | Strand  | +                   |
| Start    | 1896                      | End     | 3506                |
| Name     | OJ990515_23.9A07.C7.o1.gs | Method  | GENSCAN             |
| Start    | 1896                      | End     | 3506                |
| GI       | none                      | Score   | .94                 |
| Exons    | 1896..3506                |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22541                     | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46905                     | Strand  | +                   |
| Start    | 4055                      | End     | 5503                |
| Name     | OJ990515_23.9A07.C8.o2.gs | Method  | GENSCAN             |
| Start    | 4055                      | End     | 5503                |
| GI       | none                      | Score   | .98                 |
| Exons    | 4055..5056, 5282..5503    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46906  | Strand  | +                   |
| Start    | 6976   | End     | 9926                |
| Name     | OJ990515_23.9A07.C8.o3.gs  | Method  | GENSCAN             |
| Start    | 6976   | End     | 9926                |
| GI       | none   | Score   | .72                 |
| Exons    | 6976..7965, 8054..8117, 8168..8185, 8329..8453, 8518..9294, 9477..9764, 9828..9926 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46907  | Strand  | +                   |
| Start    | 11619  | End     | 12849               |
| Name     | OJ990515_23.9A07.C8.o4.gs                              | Method  | GENSCAN             |
| Start    | 11619  | End     | 12849               |
| GI       | none   | Score   | .54                 |
| Exons    | 11619..11909, 12112..12303, 12336..12397, 12630..12849 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22541                     | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46908                     | Strand  | +                   |
| Start    | 18018                     | End     | 19371               |
| Name     | OJ990515_23.9A07.C8.o6.gs | Method  | GENSCAN             |



|       |  |        |         |
|-------|--|--------|---------|
| Name  | OJ990515_23.9A07.C8.o19.gs   | Method | GENSCAN |
| Start | 46563  | End    | 49912   |
| GI    | none   | Score  | .96     |
| Exons | 46563..46748, 46833..47039, 47138..47812, 47819..49186, 49214..49912 |        |         |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22541   | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No.    | 46915   | Strand  | +                   |
| Start       | 46563   | End     | 50335               |
| Name        | OJ990515_23.9A07.C8.o6.np   | Method  | AAT/NAP             |
| Start       | 46922   | End     | 50335               |
| GI          | 6466937   | Score   | 1586                |
| Exons       | 46922..47496, 47532..50092, 50304..50335                                |         |                     |
| GI Descrip. | (AC011621) putative retroelement pol polyprotein [Arabidopsis thaliana] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22541                                      | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No.    | 46916                                      | Strand  | -                   |
| Start       | 1  | End     | 3406                |
| Name        | OJ990515_23.9A07.C8.o1.np                  | Method  | AAT/NAP             |
| Start       | 1  | End     | 2115                |
| GI          | 6573757                                    | Score   | 144                 |
| Exons       | 1..22, 1432..2115                          |         |                     |
| GI Descrip. | (AC009243) F28K19.6 [Arabidopsis thaliana] |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46916  | Strand  | -                   |
| Start    | 1  | End     | 3406                |
| Name     | OJ990515_23.9A07.C8.o1.gs                                | Method  | GENSCAN             |
| Start    | 759  | End     | 3406                |
| GI       | none   | Score   | .55                 |
| Exons    | 759..947, 1179..1795, 1888..2197, 2413..2680, 2847..3406 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22541                     | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46917                     | Strand  | -                   |
| Start    | 13955                     | End     | 17863               |
| Name     | OJ990515_23.9A07.C8.o5.gs | Method  | GENSCAN             |
| Start    | 13955                     | End     | 17770               |
| GI       | none                      | Score   | .75                 |
| Exons    | 13955..17770              |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No.    | 46917  | Strand  | -                   |
| Start       | 13955  | End     | 17863               |
| Name        | OJ990515_23.9A07.C8.o2.np  | Method  | AAT/NAP             |
| Start       | 13958  | End     | 17863               |
| GI          | 6539553  | Score   | 6729                |
| Exons       | 13958..17863   |         |                     |
| GI Descrip. | (AP000836) Similar to Oryza australiensis retrotransposon RIRE1 (D85597) [Oryza sativa] gi 6539590 dbj BAA88206.1  (AP000837) Similar to Oryza australiensis retrotransposon RIRE1 (D85597) [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22541                     | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46918                     | Strand  | -                   |
| Start    | 20948                     | End     | 27597               |
| Name     | OJ990515_23.9A07.C8.o8.gs | Method  | GENSCAN             |

Start 20948  
 GI none  
 Exons 20948..21102, 21766..21778

End 21778  
 Score .93

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
 Gene No. 46918 Strand -  
 Start 20948 End 27597  
 Name OJ990515\_23.9A07.C8.o3.np Method AAT/NAP  
 Start 21644 End 27597  
 GI 6815072 Score 567  
 Exons 21644..21670, 23171..23856, 27561..27597  
 GI Descrip. (AP001080) Similar to Arabidopsis thaliana chromosome II BAC  
 T13P21; hypothetical protein (AC006067) [Oryza sativa]

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
 Gene No. 46918 Strand -  
 Start 20948 End 27597  
 Name OJ990515\_23.9A07.C8.o10.gs Method GENSCAN  
 Start 25888 End 27062  
 GI none Score .79  
 Exons 25888..26567, 26591..27062

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
 Gene No. 46919 Strand -  
 Start 29331 End 31230  
 Name OJ990515\_23.9A07.C8.o12.gs Method GENSCAN  
 Start 29331 End 31230  
 GI none Score .68  
 Exons 29331..29339, 30376..30492, 30553..30669, 30716..30966,  
 31132..31171, 31177..31230

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
 Gene No. 46920 Strand -  
 Start 35005 End 36216  
 Name OJ990515\_23.9A07.C8.o14.gs Method GENSCAN  
 Start 35005 End 36216  
 GI none Score .87  
 Exons 35005..36216

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
 Gene No. 46920 Strand -  
 Start 35005 End 36216  
 Name OJ990515\_23.9A07.C8.o4.np Method AAT/NAP  
 Start 35008 End 36000  
 GI 4680492 Score 1725  
 Exons 35008..36000  
 GI Descrip. (AF119222) putative reverse transcriptase [Oryza sativa]

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
 Gene No. 46921 Strand -  
 Start 37989 End 40589  
 Name OJ990515\_23.9A07.C8.o15.gs Method GENSCAN  
 Start 37989 End 39246  
 GI none Score .68  
 Exons 37989..38130, 38187..38270, 38376..38452, 38545..38574,  
 39157..39246

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46921  | Strand  | -                   |
| Start    | 37989  | End     | 40589               |
| Name     | OJ990515_23.9A07.C8.o5.np  | Method  | AAT/NAP             |
| Start    | 38698  | End     | 40589               |
| GI       | 6907086  | Score   | 1327                |
| Exons    | 38698..38837, 38962..39182, 39233..39296, 39532..39754, 39815..40589 |         |                     |

GI Descrip. (AP001129) hypothetical protein [Oryza sativa]

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922  | Strand  | -                   |
| Start    | 50242  | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o2.tw  | Method  | TBLASTX:Wheat       |
| Start    | 14094  | End     | 14570               |
| GI       | none   | Score   | 353                 |
| Exons    | 14094..14480, 14132..14479, 14173..14481, 14495..14569, 14499..14570 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922  | Strand  | -                   |
| Start    | 50242  | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o5.ts                              | Method  | TBLASTX:Soybean     |
| Start    | 14222  | End     | 14563               |
| GI       | none   | Score   | 83                  |
| Exons    | 14222..14431, 14301..14426, 14450..14563, 14457..14537 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22541                      | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922                      | Strand  | -                   |
| Start    | 50242                      | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o7.tm  | Method  | TBLASTX:Maize       |
| Start    | 14426                      | End     | 14765               |
| GI       | none                       | Score   | 194                 |
| Exons    | 14426..14764, 14427..14765 |         |                     |

|          |                            |         |                     |
|----------|----------------------------|---------|---------------------|
| Seq. No. | 22541                      | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922                      | Strand  | -                   |
| Start    | 50242                      | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o3.ts  | Method  | TBLASTX:Soybean     |
| Start    | 14576                      | End     | 14921               |
| GI       | none                       | Score   | 123                 |
| Exons    | 14576..14920, 14721..14921 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922  | Strand  | -                   |
| Start    | 50242  | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o3.tw                              | Method  | TBLASTX:Wheat       |
| Start    | 14774  | End     | 15319               |
| GI       | none   | Score   | 48                  |
| Exons    | 14774..14980, 14784..14906, 14975..15319, 14999..15172 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22541                     | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922                     | Strand  | -                   |
| Start    | 50242                     | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o5.tm | Method  | TBLASTX:Maize       |
| Start    | 14855                     | End     | 15320               |
| GI       | none                      | Score   | 52                  |

Exons 14855..15319, 14970..15068, 15002..15184, 15138..15320

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
Gene No. 46922 Strand -  
Start 50242 End 50335  
Name OJ990515\_23.9A07.C8.o1.ts Method TBLASTX:Soybean  
Start 14990 End 15454  
GI 5509260 Score 58  
Exons 14990..15454, 15009..15068, 15141..15236  
GI Descrip. -

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
Gene No. 46922 Strand -  
Start 50242 End 50335  
Name OJ990515\_23.9A07.C8.o1.tc Method TBLASTX:Cress  
Start 15101 End 15361  
GI none Score 279  
Exons 15101..15361

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
Gene No. 46922 Strand -  
Start 50242 End 50335  
Name OJ990515\_23.9A07.C8.o1.tw Method TBLASTX:Wheat  
Start 15374 End 16129  
GI none Score 200  
Exons 15374..15613, 15375..15533, 15391..15621, 15394..15591,  
15642..16121, 15665..16129

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
Gene No. 46922 Strand -  
Start 50242 End 50335  
Name OJ990515\_23.9A07.C8.o4.ts Method TBLASTX:Soybean  
Start 15779 End 16177  
GI none Score 38  
Exons 15779..15952, 15906..15944, 15953..16177, 15999..16169

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
Gene No. 46922 Strand -  
Start 50242 End 50335  
Name OJ990515\_23.9A07.C8.o8.tm Method TBLASTX:Maize  
Start 15965 End 16399  
GI none Score 84  
Exons 15965..16399, 15990..16190

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
Gene No. 46922 Strand -  
Start 50242 End 50335  
Name OJ990515\_23.9A07.C8.o7.tw Method TBLASTX:Wheat  
Start 16130 End 16322  
GI none Score 186  
Exons 16130..16321, 16130..16321, 16131..16322

Seq. No. 22541 Seq. ID OJ990515\_23.9A07.C8  
Gene No. 46922 Strand -  
Start 50242 End 50335  
Name OJ990515\_23.9A07.C8.o6.ts Method TBLASTX:Soybean  
Start 16187 End 16573

|          |  |         |                     |
|----------|--|---------|---------------------|
| GI       | none   | Score   | 88                  |
| Exons    | 16187..16435, 16418..16573   |         |                     |
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922  | Strand  | -                   |
| Start    | 50242  | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o4.tm  | Method  | TBLASTX:Maize       |
| Start    | 16600  | End     | 16922               |
| GI       | none   | Score   | 375                 |
| Exons    | 16600..16767, 16602..16895, 16604..16915, 16668..16922                             |         |                     |
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922  | Strand  | -                   |
| Start    | 50242  | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o6.tm  | Method  | TBLASTX:Maize       |
| Start    | 17421  | End     | 17734               |
| GI       | none   | Score   | 287                 |
| Exons    | 17421..17726, 17423..17734   |         |                     |
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922  | Strand  | -                   |
| Start    | 50242  | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o5.tw  | Method  | TBLASTX:Wheat       |
| Start    | 17483  | End     | 17869               |
| GI       | none   | Score   | 248                 |
| Exons    | 17483..17869, 17484..17858   |         |                     |
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922  | Strand  | -                   |
| Start    | 50242  | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o10.tm   | Method  | TBLASTX:Maize       |
| Start    | 23455  | End     | 23839               |
| GI       | none   | Score   | 106                 |
| Exons    | 23455..23730, 23549..23710, 23554..23712, 23741..23824, 23745..23825, 23747..23839 |         |                     |
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922  | Strand  | -                   |
| Start    | 50242  | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o3.tm  | Method  | TBLASTX:Maize       |
| Start    | 43436  | End     | 44151               |
| GI       | none   | Score   | 35                  |
| Exons    | 43436..43654, 43638..43661, 43725..43772, 43765..44151, 43766..43999               |         |                     |
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922  | Strand  | -                   |
| Start    | 50242  | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o9.tw  | Method  | TBLASTX:Wheat       |
| Start    | 43894  | End     | 44229               |
| GI       | none   | Score   | 62                  |
| Exons    | 43894..43971, 44020..44229, 44021..44167   |         |                     |
| Seq. No. | 22541  | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No. | 46922  | Strand  | -                   |
| Start    | 50242  | End     | 50335               |
| Name     | OJ990515_23.9A07.C8.o8.ts  | Method  | TBLASTX:Soybean     |



Start 44017  
GI none  
Exons 44017..44265

End 44265  
Score 186

Seq. No. 22541  
Gene No. 46922  
Start 50242  
Name OJ990515\_23.9A07.C8.o8.tw  
Start 44920  
GI none  
Exons 44920..45219

Seq. ID OJ990515\_23.9A07.C8  
Strand -  
End 50335  
Method TBLASTX:Wheat  
End 45219  
Score 210

Seq. No. 22541  
Gene No. 46922  
Start 50242  
Name OJ990515\_23.9A07.C8.o4.tw  
Start 48308  
GI none  
Exons 48308..48790, 48412..48729

Seq. ID OJ990515\_23.9A07.C8  
Strand -  
End 50335  
Method TBLASTX:Wheat  
End 48790  
Score 380

Seq. No. 22541  
Gene No. 46922  
Start 50242  
Name OJ990515\_23.9A07.C8.o7.ts  
Start 48344  
GI none  
Exons 48344..48658

Seq. ID OJ990515\_23.9A07.C8  
Strand -  
End 50335  
Method TBLASTX:Soybean  
End 48658  
Score 204

Seq. No. 22541  
Gene No. 46922  
Start 50242  
Name OJ990515\_23.9A07.C8.o2.tm  
Start 48365  
GI none  
Exons 48365..48844, 48409..48813

Seq. ID OJ990515\_23.9A07.C8  
Strand -  
End 50335  
Method TBLASTX:Maize  
End 48844  
Score 443

Seq. No. 22541  
Gene No. 46922  
Start 50242  
Name OJ990515\_23.9A07.C8.o2.ts  
Start 48767  
GI none  
Exons 48767..49117

Seq. ID OJ990515\_23.9A07.C8  
Strand -  
End 50335  
Method TBLASTX:Soybean  
End 49117  
Score 337

Seq. No. 22541  
Gene No. 46922  
Start 50242  
Name OJ990515\_23.9A07.C8.o6.tw  
Start 48839  
GI none  
Exons 48839..49117, 49121..49237

Seq. ID OJ990515\_23.9A07.C8  
Strand -  
End 50335  
Method TBLASTX:Wheat  
End 49237  
Score 241

Seq. No. 22541  
Gene No. 46922  
Start 50242  
Name OJ990515\_23.9A07.C8.o1.tm  
Start 48917

Seq. ID OJ990515\_23.9A07.C8  
Strand -  
End 50335  
Method TBLASTX:Maize  
End 49336

|             |   |         |                     |
|-------------|---|---------|---------------------|
| GI          | none  | Score   | 499                 |
| Exons       | 48917..49336, 48928..49005, 49069..49302            |         |                     |
|             |   |         |                     |
| Seq. No.    | 22541   | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No.    | 46922   | Strand  | -                   |
| Start       | 50242   | End     | 50335               |
| Name        | OJ990515_23.9A07.C8.o9.ts                           | Method  | TBLASTX:Soybean     |
| Start       | 49148   | End     | 49393               |
| GI          | none  | Score   | 186                 |
| Exons       | 49148..49393  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22541   | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No.    | 46922   | Strand  | -                   |
| Start       | 50242   | End     | 50335               |
| Name        | OJ990515_23.9A07.C8.o9.tm                           | Method  | TBLASTX:Maize       |
| Start       | 49451   | End     | 49840               |
| GI          | none  | Score   | 270                 |
| Exons       | 49451..49840, 49492..49569, 49678..49824            |         |                     |
|             |   |         |                     |
| Seq. No.    | 22541   | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No.    | 46922   | Strand  | -                   |
| Start       | 50242   | End     | 50335               |
| Name        | OJ990515_23.9A07.C8.o11.tm                          | Method  | TBLASTX:Maize       |
| Start       | 49873   | End     | 50053               |
| GI          | none  | Score   | 232                 |
| Exons       | 49873..50052, 49874..50053                          |         |                     |
|             |   |         |                     |
| Seq. No.    | 22541   | Seq. ID | OJ990515_23.9A07.C8 |
| Gene No.    | 46922   | Strand  | -                   |
| Start       | 50242   | End     | 50335               |
| Name        | OJ990515_23.9A07.C8.o7.np                           | Method  | AAT/NAP             |
| Start       | 50242   | End     | 50335               |
| GI          | 6907086   | Score   | 95                  |
| Exons       | 50242..50335  |         |                     |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa]      |         |                     |
|             |   |         |                     |
| Seq. No.    | 22542   | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No.    | 46923   | Strand  | +                   |
| Start       | 1   | End     | 4521                |
| Name        | OJ990515_23.9A07.C9.o1.np                           | Method  | AAT/NAP             |
| Start       | 1   | End     | 4026                |
| GI          | 5777623   | Score   | 843                 |
| Exons       | 1..232, 492..536, 729..1319, 2155..2398, 3958..4026 |         |                     |
| GI Descrip. | (AJ245900) CAA303711.1 protein [Oryza sativa]       |         |                     |
|             |   |         |                     |
| Seq. No.    | 22542   | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No.    | 46923   | Strand  | +                   |
| Start       | 1   | End     | 4521                |
| Name        | OJ990515_23.9A07.C9.o1.gs                           | Method  | GENSCAN             |
| Start       | 88  | End     | 270                 |
| GI          | none  | Score   | .97                 |
| Exons       | 88..270   |         |                     |
|             |   |         |                     |
| Seq. No.    | 22542   | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No.    | 46923   | Strand  | +                   |
| Start       | 1   | End     | 4521                |
| Name        | OJ990515_23.9A07.C9.o2.np                           | Method  | AAT/NAP             |

|             |   |       |      |
|-------------|---|-------|------|
| Start       | 3476  | End   | 4521 |
| GI          | 6466937   | Score | 602  |
| Exons       | 3476..4521  |       |      |
| GI Descrip. | (AC011621) putative retroelement pol polyprotein [Arabidopsis thaliana] |       |      |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22542                     | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No. | 46923                     | Strand  | +                   |
| Start    | 1                         | End     | 4521                |
| Name     | OJ990515_23.9A07.C9.o3.gs | Method  | GENSCAN             |
| Start    | 3499                      | End     | 4497                |
| GI       | none                      | Score   | .87                 |
| Exons    | 3499..4497                |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22542   | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No.    | 46924   | Strand  | +                   |
| Start       | 5609  | End     | 5932                |
| Name        | OJ990515_23.9A07.C9.o3.np   | Method  | AAT/NAP             |
| Start       | 5609  | End     | 5932                |
| GI          | 6069646   | Score   | 90                  |
| Exons       | 5609..5932  |         |                     |
| GI Descrip. | (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi 6907112 dbj BAA90639.1  (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22542                     | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No. | 46925                     | Strand  | +                   |
| Start    | 7610                      | End     | 8986                |
| Name     | OJ990515_23.9A07.C9.o4.gs | Method  | GENSCAN             |
| Start    | 7610                      | End     | 8986                |
| GI       | none                      | Score   | .99                 |
| Exons    | 7610..8986                |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22542   | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No.    | 46926   | Strand  | +                   |
| Start       | 11793   | End     | 14298               |
| Name        | OJ990515_23.9A07.C9.o5.np                         | Method  | AAT/NAP             |
| Start       | 11793   | End     | 14298               |
| GI          | 4567258   | Score   | 76                  |
| Exons       | 11793..11822, 13099..13277, 14257..14298          |         |                     |
| GI Descrip. | (AC007070) unknown protein [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22542                     | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No. | 46927                     | Strand  | -                   |
| Start    | 838                       | End     | 1413                |
| Name     | OJ990515_23.9A07.C9.o2.gs | Method  | GENSCAN             |
| Start    | 838                       | End     | 1413                |
| GI       | none                      | Score   | .97                 |
| Exons    | 838..1413                 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22542                     | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No. | 46928                     | Strand  | -                   |
| Start    | 9630                      | End     | 14059               |
| Name     | OJ990515_23.9A07.C9.o2.tm | Method  | TBLASTX:Maize       |
| Start    | 3478                      | End     | 3822                |

GI none  
Exons 3478..3822, 3501..3821

Score 310

Seq. No. 22542  
Gene No. 46928  
Start 9630  
Name OJ990515\_23.9A07.C9.o2.tw  
Start 3487  
GI none  
Exons 3487..4023

Seq. ID OJ990515\_23.9A07.C9  
Strand -  
End 14059  
Method TBLASTX:Wheat  
End 4023  
Score 312

Seq. No. 22542  
Gene No. 46928  
Start 9630  
Name OJ990515\_23.9A07.C9.o3.tm  
Start 4120  
GI none  
Exons 4120..4491, 4122..4448, 4249..4482

Seq. ID OJ990515\_23.9A07.C9  
Strand -  
End 14059  
Method TBLASTX:Maize  
End 4491  
Score 280

Seq. No. 22542  
Gene No. 46928  
Start 9630  
Name OJ990515\_23.9A07.C9.o5.gs  
Start 9630  
GI none  
Exons 9630..9701, 10217..10314, 10776..10971, 12015..12072, 12205..12359, 12838..12861, 13123..13245, 13289..13372, 13721..14018

Seq. ID OJ990515\_23.9A07.C9  
Strand -  
End 14059  
Method GENSCAN  
End 14018  
Score .74

Seq. No. 22542  
Gene No. 46928  
Start 9630  
Name OJ990515\_23.9A07.C9.o1.gp  
Start 10502  
GI 392\_1.R1084  
Exons 10502..10971, 12015..12072, 12205..12359, 12442..12508  
GI Descrip. '2982268 4.0e-70 (AF051217) probable 40S ribosomal protein S15 [Picea mariana]'

Seq. ID OJ990515\_23.9A07.C9  
Strand -  
End 14059  
Method AAT/GAP  
End 12508  
Score 1284

Seq. No. 22542  
Gene No. 46928  
Start 9630  
Name OJ990515\_23.9A07.C9.o1.tm  
Start 10606  
GI none  
Exons 10606..10665, 10607..10645, 10708..10971, 10717..10971, 10724..10987, 10931..10972, 12014..12073, 12015..12077, 12015..12074, 12163..12318, 12204..12329, 12222..12329, 12309..12359, 12324..12359

Seq. ID OJ990515\_23.9A07.C9  
Strand -  
End 14059  
Method TBLASTX:Maize  
End 12359  
Score 59

Seq. No. 22542  
Gene No. 46928  
Start 9630  
Name OJ990515\_23.9A07.C9.o1.tw  
Start 10699  
GI none  
Exons 10699..10971, 10710..10766, 10711..10971, 10721..10987,

Seq. ID OJ990515\_23.9A07.C9  
Strand -  
End 14059  
Method TBLASTX:Wheat  
End 12359  
Score 59

12014..12073, 12015..12077, 12202..12321, 12204..12359,  
12222..12359

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22542   | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No. | 46928   | Strand  | -                   |
| Start    | 9630  | End     | 14059               |
| Name     | OJ990515_23.9A07.C9.o1.ts   | Method  | TBLASTX:Soybean     |
| Start    | 10711   | End     | 12377               |
| GI       | none  | Score   | 202                 |
| Exons    | 10711..10971, 10723..10977, 10724..10987, 12010..12075,<br>12015..12074, 12202..12321, 12225..12377 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22542   | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No. | 46928   | Strand  | -                   |
| Start    | 9630  | End     | 14059               |
| Name     | OJ990515_23.9A07.C9.o1.tc   | Method  | TBLASTX:Cress       |
| Start    | 10723   | End     | 12350               |
| GI       | none  | Score   | 376                 |
| Exons    | 10723..10971, 10724..11002, 12010..12075, 12015..12074,<br>12192..12317, 12225..12350 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22542  | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No.    | 46928  | Strand  | -                   |
| Start       | 9630   | End     | 14059               |
| Name        | OJ990515_23.9A07.C9.o4.np  | Method  | AAT/NAP             |
| Start       | 10726  | End     | 12362               |
| GI          | 401043   | Score   | 681                 |
| Exons       | 10726..10971, 12015..12072, 12205..12362   |         |                     |
| GI Descrip. | 40S RIBOSOMAL PROTEIN S15 gi 218131 dbj BAA01746  (D10962)<br>unnamed protein product [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22542  | Seq. ID | OJ990515_23.9A07.C9 |
| Gene No.    | 46928  | Strand  | -                   |
| Start       | 9630   | End     | 14059               |
| Name        | OJ990515_23.9A07.C9.o6.np                      | Method  | AAT/NAP             |
| Start       | 12577  | End     | 14059               |
| GI          | 6721516  | Score   | 136                 |
| Exons       | 12577..12607, 13741..14059                     |         |                     |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa] |         |                     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22543                      | Seq. ID | OJ990515_23.9A07.C10 |
| Gene No. | 46929                      | Strand  | +                    |
| Start    | 86                         | End     | 446                  |
| Name     | OJ990515_23.9A07.C10.o1.gs | Method  | GENSCAN              |
| Start    | 86                         | End     | 446                  |
| GI       | none                       | Score   | .48                  |
| Exons    | 86..446                    |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22543                              | Seq. ID | OJ990515_23.9A07.C10 |
| Gene No. | 46930                              | Strand  | +                    |
| Start    | 6368                               | End     | 8134                 |
| Name     | OJ990515_23.9A07.C10.o1.gp         | Method  | AAT/GAP              |
| Start    | 6368                               | End     | 8134                 |
| GI       | 286923                             | Score   | 837                  |
| Exons    | 6368..6501, 7644..7777, 7920..8134 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22543 | Seq. ID | OJ990515_23.9A07.C10 |
|----------|-------|---------|----------------------|

|             |   |        |         |
|-------------|---|--------|---------|
| Gene No.    | 46931   | Strand | -       |
| Start       | 690   | End    | 1021    |
| Name        | OJ990515_23.9A07.C10.o1.np                    | Method | AAT/NAP |
| Start       | 690   | End    | 1021    |
| GI          | 5777624                                       | Score  | 160     |
| Exons       | 690..1021                                     |        |         |
| GI Descrip. | (AJ245900) CAA303712.1 protein [Oryza sativa] |        |         |

  

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22543   | Seq. ID | OJ990515_23.9A07.C10 |
| Gene No.    | 46932   | Strand  | -                    |
| Start       | 6838  | End     | 7437                 |
| Name        | OJ990515_23.9A07.C10.o3.np  | Method  | AAT/NAP              |
| Start       | 6838  | End     | 7437                 |
| GI          | 6016874   | Score   | 59                   |
| Exons       | 6838..7058, 7294..7437  |         |                      |
| GI Descrip. | (AP000570) ESTs C19143(E10020), D25076(R3116) correspond to a region of the predicted gene.; Similar to putative AC9 transposase. (P03010) [Oryza sativa] |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22544  | Seq. ID | OJ990515_23.9A07.C11 |
| Gene No.    | 46933  | Strand  | +                    |
| Start       | 1  | End     | 722                  |
| Name        | OJ990515_23.9A07.C11.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 722                  |
| GI          | 132672   | Score   | 160                  |
| Exons       | 1..27, 553..722  |         |                      |
| GI Descrip. | CHLOROPLAST 50S RIBOSOMAL PROTEIN L14 gi 71224 pir  R5RZ14 ribosomal protein L14 - rice chloroplast gi 12023 emb CAA33932  (X15901) ribosomal protein L14 [Oryza sativa] gi 226644 prf  1603356BU ribosomal protein L14 [Oryza sativa] |         |                      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22544                      | Seq. ID | OJ990515_23.9A07.C11 |
| Gene No. | 46933                      | Strand  | +                    |
| Start    | 1                          | End     | 722                  |
| Name     | OJ990515_23.9A07.C11.o1.gs | Method  | GENSCAN              |
| Start    | 290                        | End     | 455                  |
| GI       | none                       | Score   | .98                  |
| Exons    | 290..455                   |         |                      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22544                      | Seq. ID | OJ990515_23.9A07.C11 |
| Gene No. | 46934                      | Strand  | +                    |
| Start    | 1356                       | End     | 1496                 |
| Name     | OJ990515_23.9A07.C11.o2.gs | Method  | GENSCAN              |
| Start    | 1356                       | End     | 1496                 |
| GI       | none                       | Score   | .69                  |
| Exons    | 1356..1496                 |         |                      |

  

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22544   | Seq. ID | OJ990515_23.9A07.C11 |
| Gene No.    | 46935   | Strand  | -                    |
| Start       | 210   | End     | 522                  |
| Name        | OJ990515_23.9A07.C11.o1.gp  | Method  | AAT/GAP              |
| Start       | 210   | End     | 522                  |
| GI          | 77434_1.R1084   | Score   | 98                   |
| Exons       | 210..270, 498..522  |         |                      |
| GI Descrip. | '2827528/emb CAA16536.1  2.0e-10 (AL021633) predicted protein [Arabidopsis thaliana]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22544  | Seq. ID | OJ990515_23.9A07.C11 |
| Gene No.    | 46936  | Strand  | -                    |
| Start       | 557  | End     | 723                  |
| Name        | OJ990515_23.9A07.C11.o2.gp   | Method  | AAT/GAP              |
| Start       | 557  | End     | 723                  |
| GI          | 481_1.R1084  | Score   | 220                  |
| Exons       | 557..723   |         |                      |
| GI Descrip. | '132672/sp P12137 RK14_ORYSA 6.0e-57 CHLOROPLAST 50S RIBOSOMAL PROTEIN L14 >gi_71224_pir_R5RZ14 ribosomal protein L14 - rice chloroplast >gi_12023_emb_CAA33932_ (X15901) ribosomal protein L14 [Oryza sativa] >gi_226644_prf__1603356BU ribosomal protein L14 [Oryza sativa]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22545  | Seq. ID | OJ990515_23.9A07.C13 |
| Gene No.    | 46937  | Strand  | -                    |
| Start       | 1  | End     | 639                  |
| Name        | OJ990515_23.9A07.C13.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 639                  |
| GI          | 2498930  | Score   | 734                  |
| Exons       | 1..408, 576..639   |         |                      |
| GI Descrip. | DORSAL-VENTRAL PATTERNING PROTEIN SOG (SHORT GASTRULATION PROTEIN) gi 1203794 (U18774) Sog [Drosophila melanogaster] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22545                      | Seq. ID | OJ990515_23.9A07.C13 |
| Gene No. | 46937                      | Strand  | -                    |
| Start    | 1                          | End     | 639                  |
| Name     | OJ990515_23.9A07.C13.o1.gs | Method  | GENSCAN              |
| Start    | 14                         | End     | 635                  |
| GI       | none                       | Score   | 1                    |
| Exons    | 14..408, 576..635          |         |                      |

|          |                              |         |                     |
|----------|------------------------------|---------|---------------------|
| Seq. No. | 22546                        | Seq. ID | OJ990415_11.9A07.C1 |
| Gene No. | 46938                        | Strand  | -                   |
| Start    | 166                          | End     | 598                 |
| Name     | OJ990415_11.9A07.C1.o1.gs    | Method  | GENSCAN             |
| Start    | 166                          | End     | 598                 |
| GI       | none                         | Score   | .9                  |
| Exons    | 166..245, 349..474, 548..598 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22547   | Seq. ID | OJ990415_11.9A07.C3 |
| Gene No.    | 46939   | Strand  | -                   |
| Start       | 1   | End     | 514                 |
| Name        | OJ990415_11.9A07.C3.o1.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 514                 |
| GI          | 6721561   | Score   | 90                  |
| Exons       | 1..61, 408..514   |         |                     |
| GI Descrip. | (AP001073) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]<br>gi 6815086 dbj BAA90372.1  (AP001081) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22548                     | Seq. ID | OJ990415_11.9A07.C5 |
| Gene No. | 46940                     | Strand  | -                   |
| Start    | 385                       | End     | 609                 |
| Name     | OJ990415_11.9A07.C5.o1.gs | Method  | GENSCAN             |
| Start    | 385                       | End     | 609                 |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| GI          | none  | Score   | .74                 |
| Exons       | 385..609  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22549   | Seq. ID | OJ990415_11.9A07.C7 |
| Gene No.    | 46941   | Strand  | -                   |
| Start       | 107   | End     | 656                 |
| Name        | OJ990415_11.9A07.C7.ol.gs                           | Method  | GENSCAN             |
| Start       | 107   | End     | 607                 |
| GI          | none  | Score   | 1                   |
| Exons       | 107..607  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22549   | Seq. ID | OJ990415_11.9A07.C7 |
| Gene No.    | 46941   | Strand  | -                   |
| Start       | 107   | End     | 656                 |
| Name        | OJ990415_11.9A07.C7.ol.np                           | Method  | AAT/NAP             |
| Start       | 107   | End     | 656                 |
| GI          | 285741  | Score   | 439                 |
| Exons       | 107..656  |         |                     |
| GI Descrip. | (D14550) EDGP precursor [Daucus carota]             |         |                     |
|             |   |         |                     |
| Seq. No.    | 22549   | Seq. ID | OJ990415_11.9A07.C7 |
| Gene No.    | 46941   | Strand  | -                   |
| Start       | 107   | End     | 656                 |
| Name        | OJ990415_11.9A07.C7.ol.tc                           | Method  | TBLASTX:Cress       |
| Start       | 119   | End     | 566                 |
| GI          | none  | Score   | 137                 |
| Exons       | 119..238, 221..466, 222..443, 450..566, 455..553    |         |                     |
|             |   |         |                     |
| Seq. No.    | 22549   | Seq. ID | OJ990415_11.9A07.C7 |
| Gene No.    | 46941   | Strand  | -                   |
| Start       | 107   | End     | 656                 |
| Name        | OJ990415_11.9A07.C7.ol.ts                           | Method  | TBLASTX:Soybean     |
| Start       | 119   | End     | 653                 |
| GI          | none  | Score   | 130                 |
| Exons       | 119..238, 219..443, 299..469, 470..652, 474..653    |         |                     |
|             |   |         |                     |
| Seq. No.    | 22550   | Seq. ID | OJ990415_11.9A07.C8 |
| Gene No.    | 46942   | Strand  | +                   |
| Start       | 1   | End     | 659                 |
| Name        | OJ990415_11.9A07.C8.ol.np                           | Method  | AAT/NAP             |
| Start       | 1   | End     | 659                 |
| GI          | 2827551   | Score   | 83                  |
| Exons       | 1..79, 504..659                                     |         |                     |
| GI Descrip. | (AL021635) predicted protein [Arabidopsis thaliana] |         |                     |
|             |   |         |                     |
| Seq. No.    | 22551   | Seq. ID | OJ990415_11.9A07.C9 |
| Gene No.    | 46943   | Strand  | -                   |
| Start       | 405   | End     | 920                 |
| Name        | OJ990415_11.9A07.C9.ol.gs                           | Method  | GENSCAN             |
| Start       | 405   | End     | 824                 |
| GI          | none  | Score   | .86                 |
| Exons       | 405..824  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22551   | Seq. ID | OJ990415_11.9A07.C9 |
| Gene No.    | 46943   | Strand  | -                   |
| Start       | 405   | End     | 920                 |
| Name        | OJ990415_11.9A07.C9.ol.np                           | Method  | AAT/NAP             |



|             |   |       |     |
|-------------|---|-------|-----|
| Start       | 405                                     | End   | 920 |
| GI          | 285741                                  | Score | 394 |
| Exons       | 405..920                                |       |     |
| GI Descrip. | (D14550) EDGP precursor [Daucus carota] |       |     |

|          |                              |         |                     |
|----------|------------------------------|---------|---------------------|
| Seq. No. | 22551                        | Seq. ID | OJ990415_11.9A07.C9 |
| Gene No. | 46943                        | Strand  | -                   |
| Start    | 405                          | End     | 920                 |
| Name     | OJ990415_11.9A07.C9.ol.tc    | Method  | TBLASTX:Cress       |
| Start    | 414                          | End     | 851                 |
| GI       | none                         | Score   | 178                 |
| Exons    | 414..761, 517..762, 750..851 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22551  | Seq. ID | OJ990415_11.9A07.C9 |
| Gene No. | 46943  | Strand  | -                   |
| Start    | 405  | End     | 920                 |
| Name     | OJ990415_11.9A07.C9.ol.ts                        | Method  | TBLASTX:Soybean     |
| Start    | 414  | End     | 848                 |
| GI       | none   | Score   | 62                  |
| Exons    | 414..584, 517..585, 582..764, 583..804, 765..848 |         |                     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22552                      | Seq. ID | OJ990415_11.9A07.C10 |
| Gene No. | 46944                      | Strand  | +                    |
| Start    | 161                        | End     | 235                  |
| Name     | OJ990415_11.9A07.C10.ol.gs | Method  | GENSCAN              |
| Start    | 161                        | End     | 235                  |
| GI       | none                       | Score   | .47                  |
| Exons    | 161..235                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22553                      | Seq. ID | OJ990415_11.9A07.C11 |
| Gene No. | 46945                      | Strand  | +                    |
| Start    | 119                        | End     | 598                  |
| Name     | OJ990415_11.9A07.C11.ol.gs | Method  | GENSCAN              |
| Start    | 119                        | End     | 598                  |
| GI       | none                       | Score   | .6                   |
| Exons    | 119..598                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22554                      | Seq. ID | OJ990415_11.9A07.C12 |
| Gene No. | 46946                      | Strand  | -                    |
| Start    | 1129                       | End     | 1219                 |
| Name     | OJ990415_11.9A07.C12.ol.gs | Method  | GENSCAN              |
| Start    | 1129                       | End     | 1219                 |
| GI       | none                       | Score   | .99                  |
| Exons    | 1129..1219                 |         |                      |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22555                            | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No. | 46947                            | Strand  | +                    |
| Start    | 165                              | End     | 9700                 |
| Name     | OJ990415_11.9A07.C13.ol.gs       | Method  | GENSCAN              |
| Start    | 165                              | End     | 5025                 |
| GI       | none                             | Score   | .69                  |
| Exons    | 165..316, 2773..2967, 4510..5025 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22555                      | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No. | 46947                      | Strand  | +                    |
| Start    | 165                        | End     | 9700                 |
| Name     | OJ990415_11.9A07.C13.ol.np | Method  | AAT/NAP              |

|             |   |       |      |
|-------------|---|-------|------|
| Start       | 4520  | End   | 7087 |
| GI          | 2827551   | Score | 261  |
| Exons       | 4520..4939, 7070..7087                              |       |      |
| GI Descrip. | (AL021635) predicted protein [Arabidopsis thaliana] |       |      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22555                      | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No. | 46947                      | Strand  | +                    |
| Start    | 165                        | End     | 9700                 |
| Name     | OJ990415_11.9A07.C13.o1.gp | Method  | AAT/GAP              |
| Start    | 5013                       | End     | 5199                 |
| GI       | 2796383                    | Score   | 361                  |
| Exons    | 5013..5199                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22555   | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No.    | 46947   | Strand  | +                    |
| Start       | 165   | End     | 9700                 |
| Name        | OJ990415_11.9A07.C13.o2.np                          | Method  | AAT/NAP              |
| Start       | 5989  | End     | 9700                 |
| GI          | 2827551   | Score   | 315                  |
| Exons       | 5989..6008, 7100..7543, 9667..9700                  |         |                      |
| GI Descrip. | (AL021635) predicted protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22555                      | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No. | 46947                      | Strand  | +                    |
| Start    | 165                        | End     | 9700                 |
| Name     | OJ990415_11.9A07.C13.o3.gs | Method  | GENSCAN              |
| Start    | 7133                       | End     | 7606                 |
| GI       | none                       | Score   | .89                  |
| Exons    | 7133..7606                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22555   | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No.    | 46947   | Strand  | +                    |
| Start       | 165   | End     | 9700                 |
| Name        | OJ990415_11.9A07.C13.o3.gp  | Method  | AAT/GAP              |
| Start       | 7168  | End     | 7857                 |
| GI          | 4716526   | Score   | 1182                 |
| Exons       | 7168..7857  |         |                      |
| GI Descrip. | 2827551/emb CAA16559  1.0e-10 (AL021635) predicted protein [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22555  | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No.    | 46948  | Strand  | +                    |
| Start       | 12221  | End     | 12845                |
| Name        | OJ990415_11.9A07.C13.o3.np   | Method  | AAT/NAP              |
| Start       | 12221  | End     | 12845                |
| GI          | 322756   | Score   | 94                   |
| Exons       | 12221..12489, 12806..12845   |         |                      |
| GI Descrip. | pistil extensin-like protein (clone pMG07) - common tobacco (fragment) gi 19921 emb CAA78396  (Z14018) pistil extensin like protein, partial CDS [Nicotiana tabacum] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22555                      | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No. | 46949                      | Strand  | -                    |
| Start    | 5431                       | End     | 6068                 |
| Name     | OJ990415_11.9A07.C13.o2.gs | Method  | GENSCAN              |
| Start    | 5431                       | End     | 6068                 |
| GI       | none                       | Score   | .43                  |

Exons 5431..5612, 5705..6068

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22555  | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No. | 46950  | Strand  | -                    |
| Start    | 9429   | End     | 12821                |
| Name     | OJ990415_11.9A07.C13.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4518   | End     | 7468                 |
| GI       | none   | Score   | 332                  |
| Exons    | 4518..4706, 4519..4866, 4519..4797, 4761..4862, 7103..7468, 7123..7461 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22555                              | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No. | 46950                              | Strand  | -                    |
| Start    | 9429                               | End     | 12821                |
| Name     | OJ990415_11.9A07.C13.o1.tc         | Method  | TBLASTX:Cress        |
| Start    | 4525                               | End     | 7351                 |
| GI       | none                               | Score   | 165                  |
| Exons    | 4525..4722, 7100..7351, 7102..7341 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22555  | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No. | 46950  | Strand  | -                    |
| Start    | 9429   | End     | 12821                |
| Name     | OJ990415_11.9A07.C13.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 4525   | End     | 7669                 |
| GI       | none   | Score   | 72                   |
| Exons    | 4525..4587, 4525..4587, 4581..4700, 4582..4977, 4582..4935, 7097..7177, 7098..7187, 7099..7194, 7100..7189, 7182..7580, 7183..7587, 7184..7588, 7625..7669 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22555   | Seq. ID | OJ990415_11.9A07.C13 |
| Gene No. | 46950   | Strand  | -                    |
| Start    | 9429  | End     | 12821                |
| Name     | OJ990415_11.9A07.C13.o4.gs                        | Method  | GENSCAN              |
| Start    | 9429  | End     | 12821                |
| GI       | none  | Score   | .4                   |
| Exons    | 9429..9529, 9667..9874, 9907..10021, 12691..12821 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22556                      | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46951                      | Strand  | +                    |
| Start    | 94                         | End     | 970                  |
| Name     | OJ990415_11.9A07.C14.o1.gs | Method  | GENSCAN              |
| Start    | 94                         | End     | 970                  |
| GI       | none                       | Score   | .8                   |
| Exons    | 94..232, 850..970          |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46952  | Strand  | +                    |
| Start    | 1471   | End     | 6124                 |
| Name     | OJ990415_11.9A07.C14.o2.gs                                 | Method  | GENSCAN              |
| Start    | 1471   | End     | 6124                 |
| GI       | none   | Score   | .8                   |
| Exons    | 1471..1580, 2977..3451, 4461..4671, 5265..5434, 6071..6124 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22556                      | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46952                      | Strand  | +                    |
| Start    | 1471                       | End     | 6124                 |
| Name     | OJ990415_11.9A07.C14.o3.np | Method  | AAT/NAP              |

Start 1471 End 3533  
 GI 6721561 Score 74  
 Exons 1471..1548, 3497..3533  
 GI Descrip. (AP001073) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]  
 gi|6815086|dbj|BAA90372.1| (AP001081) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14  
 Gene No. 46952 Strand +  
 Start 1471 End 6124  
 Name OJ990415\_11.9A07.C14.o4.np Method AAT/NAP  
 Start 3001 End 5565  
 GI 4249413 Score 544  
 Exons 3001..3131, 4465..4671, 5265..5438, 5522..5565  
 GI Descrip. (AC006072) unknown protein [Arabidopsis thaliana]

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14  
 Gene No. 46953 Strand +  
 Start 8524 End 9623  
 Name OJ990415\_11.9A07.C14.o4.gp Method AAT/GAP  
 Start 8524 End 9623  
 GI 2291\_1.R1084 Score 2052  
 Exons 8524..9623  
 GI Descrip. '133936/sp|P12146|RR3\_ORYSA 3.0e-27 CHLOROPLAST 30S RIBOSOMAL PROTEIN S3 >gi\_70867\_pir\_R3RZ3 ribosomal protein S3 - rice chloroplast >gi\_12025\_emb\_CAA33934\_(X15901) ribosomal protein S3 [Oryza sativa] >gi\_226646\_prf\_1603356BW ribosomal protein S3 [Oryza sativa]'

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14  
 Gene No. 46954 Strand +  
 Start 10554 End 12491  
 Name OJ990415\_11.9A07.C14.o5.gp Method AAT/GAP  
 Start 10554 End 12491  
 GI none Score 941  
 Exons 10554..10736, 10915..10960, 12079..12166, 12284..12491

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14  
 Gene No. 46955 Strand +  
 Start 17432 End 17880  
 Name OJ990415\_11.9A07.C14.o6.gp Method AAT/GAP  
 Start 17432 End 17880  
 GI uC-osflcyp079a12a1 Score 874  
 Exons 17432..17880  
 GI Descrip. '3924606 7.0e-22 (AF069442) hypothetical protein [Arabidopsis thaliana]'

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14  
 Gene No. 46956 Strand -  
 Start 1 End 5399  
 Name OJ990415\_11.9A07.C14.o1.np Method AAT/NAP  
 Start 1 End 2032  
 GI 6815109 Score 197  
 Exons 1..352, 385..652, 1966..2032  
 GI Descrip. (AP001081) hypothetical protein [Oryza sativa]

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22556   | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46956   | Strand  | -                    |
| Start       | 1   | End     | 5399                 |
| Name        | OJ990415_11.9A07.C14.o2.np                              | Method  | AAT/NAP              |
| Start       | 1349  | End     | 5399                 |
| GI          | 4680183   | Score   | 109                  |
| Exons       | 1349..1438, 5374..5399                                  |         |                      |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22556   | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46957   | Strand  | -                    |
| Start       | 6358  | End     | 6746                 |
| Name        | OJ990415_11.9A07.C14.o1.gp  | Method  | AAT/GAP              |
| Start       | 6358  | End     | 6746                 |
| GI          | 5003883   | Score   | 746                  |
| Exons       | 6358..6746  |         |                      |
| GI Descrip. | 11957/emb X15901 CHOSXX 1.0e-166 Rice complete chloroplast genome |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46957  | Strand  | -                    |
| Start       | 6358   | End     | 6746                 |
| Name        | OJ990415_11.9A07.C14.o5.np   | Method  | AAT/NAP              |
| Start       | 6369   | End     | 6689                 |
| GI          | 124197   | Score   | 519                  |
| Exons       | 6369..6689   |         |                      |
| GI Descrip. | TRANSLATION INITIATION FACTOR IF-1, CHLOROPLAST<br>gi 72885 pir  FIRZ1 translation initiation factor IF-1 - rice<br>chloroplast gi 12021 emb CAA33930  (X15901) initiation factor 1<br>[Oryza sativa] gi 226642 prf  1603356BR initiation factor 1<br>[Oryza sativa] gi 227785 prf  1711263A initiation factor 1<br>[Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46958  | Strand  | -                    |
| Start       | 6807   | End     | 7214                 |
| Name        | OJ990415_11.9A07.C14.o6.np   | Method  | AAT/NAP              |
| Start       | 6807   | End     | 7214                 |
| GI          | 134022   | Score   | 661                  |
| Exons       | 6807..7214   |         |                      |
| GI Descrip. | CHLOROPLAST 30S RIBOSOMAL PROTEIN S8 gi 70914 pir  R3RZ8<br>ribosomal protein S8 - rice chloroplast gi 12022 emb CAA33931 <br>(X15901) ribosomal protein S8 [Oryza sativa]<br>gi 226643 prf  1603356BT ribosomal protein S8 [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22556   | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46959   | Strand  | -                    |
| Start       | 7354  | End     | 15297                |
| Name        | OJ990415_11.9A07.C14.o2.gp  | Method  | AAT/GAP              |
| Start       | 7296  | End     | 7882                 |
| GI          | 481_1.R1084   | Score   | 992                  |
| Exons       | 7296..7882  |         |                      |
| GI Descrip. | '132672/sp P12137 RK14_ORYSA 6.0e-57 CHLOROPLAST 50S RIBOSOMAL<br>PROTEIN L14 >gi_71224_pir_R5RZ14 ribosomal protein L14 - rice<br>chloroplast >gi_12023_emb_CAA33932_ (X15901) ribosomal protein<br>L14 [Oryza sativa] >gi_226644_prf__1603356BU ribosomal protein |         |                      |

L14 [Oryza sativa]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46959  | Strand  | -                    |
| Start    | 7354   | End     | 15297                |
| Name     | OJ990415_11.9A07.C14.o4.gs   | Method  | GENSCAN              |
| Start    | 7354   | End     | 13771                |
| GI       | none   | Score   | .53                  |
| Exons    | 7354..7691, 10132..10258, 10379..10638, 12214..12374,<br>12414..12576, 12624..12716, 13030..13183, 13296..13452,<br>13758..13771 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22556   | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46959   | Strand  | -                    |
| Start       | 7354  | End     | 15297                |
| Name        | OJ990415_11.9A07.C14.o7.np  | Method  | AAT/NAP              |
| Start       | 7357  | End     | 7725                 |
| GI          | 132672  | Score   | 594                  |
| Exons       | 7357..7725  |         |                      |
| GI Descrip. | CHLOROPLAST 50S RIBOSOMAL PROTEIN L14 gi 71224 pir  R5RZ14<br>ribosomal protein L14 - rice chloroplast gi 12023 emb CAA33932 <br>(X15901) ribosomal protein L14 [Oryza sativa]<br>gi 226644 prf  1603356BU ribosomal protein L14 [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46959  | Strand  | -                    |
| Start       | 7354   | End     | 15297                |
| Name        | OJ990415_11.9A07.C14.o8.np   | Method  | AAT/NAP              |
| Start       | 7839   | End     | 8245                 |
| GI          | 132712   | Score   | 643                  |
| Exons       | 7839..8245   |         |                      |
| GI Descrip. | CHLOROPLAST 50S RIBOSOMAL PROTEIN L16 gi 71250 pir  R5RZ16<br>ribosomal protein L16 - rice chloroplast gi 669084 emb CAA33933 <br>(X15901) ribosomal protein L16 [Oryza sativa]<br>gi 226645 prf  1603356BV ribosomal protein L16 [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46959  | Strand  | -                    |
| Start       | 7354   | End     | 15297                |
| Name        | OJ990415_11.9A07.C14.o3.gp   | Method  | AAT/GAP              |
| Start       | 8186   | End     | 8449                 |
| GI          | LIB3432-015-P1-K1-H8   | Score   | 446                  |
| Exons       | 8186..8449   |         |                      |
| GI Descrip. | '11957/emb X15901 CHOSXX 1.0e-129 Rice complete chloroplast<br>genome' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46959  | Strand  | -                    |
| Start       | 7354   | End     | 15297                |
| Name        | OJ990415_11.9A07.C14.o9.np   | Method  | AAT/NAP              |
| Start       | 9440   | End     | 11159                |
| GI          | 133936   | Score   | 297                  |
| Exons       | 9440..9676, 11121..11159   |         |                      |
| GI Descrip. | CHLOROPLAST 30S RIBOSOMAL PROTEIN S3 gi 70867 pir  R3RZ3<br>ribosomal protein S3 - rice chloroplast gi 12025 emb CAA33934 <br>(X15901) ribosomal protein S3 [Oryza sativa]<br>gi 226646 prf  1603356BW ribosomal protein S3 [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22556   | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46959   | Strand  | -                    |
| Start       | 7354  | End     | 15297                |
| Name        | OJ990415_11.9A07.C14.o10.np   | Method  | AAT/NAP              |
| Start       | 13030   | End     | 15297                |
| GI          | 4115939   | Score   | 501                  |
| Exons       | 13030..13183, 13296..13452, 15203..15297  |         |                      |
| GI Descrip. | (AF118223) contains similarity to Methanobacterium thermoautotrophicum transcriptional regulator (GB:AE000850) [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 3311   | End     | 5325                 |
| GI       | none   | Score   | 72                   |
| Exons    | 3311..3373, 3391..3453, 3410..3454, 4452..4589, 4452..4595, 4456..4599, 4459..4596, 4463..4603, 4562..4675, 4581..4673, 4594..4674, 5266..5325, 5267..5323 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o4.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 4452   | End     | 5434                 |
| GI       | none   | Score   | 348                  |
| Exons    | 4452..4673, 4452..4670, 4466..4684, 5266..5433, 5267..5434 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o6.tc   | Method  | TBLASTX:Cress        |
| Start    | 4455   | End     | 5322                 |
| GI       | none   | Score   | 61                   |
| Exons    | 4455..4529, 4457..4528, 4503..4673, 4505..4675, 4506..4673, 4507..4674, 5257..5322, 5264..5320 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22556                              | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960                              | Strand  | -                    |
| Start    | 17600                              | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o9.tm         | Method  | TBLASTX:Maize        |
| Start    | 5326                               | End     | 5555                 |
| GI       | none                               | Score   | 184                  |
| Exons    | 5326..5436, 5327..5437, 5520..5555 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 6262   | End     | 7454                 |
| GI       | none   | Score   | 75                   |
| Exons    | 6262..6312, 6262..6330, 6263..6352, 6263..6346, 6357..6725, 6359..6637, 6411..6668, 6733..7320, 6736..6786, 6740..6790, 6787..7452, 6789..7436, 7019..7453, 7365..7454 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22556                      | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960                      | Strand  | -                    |
| Start    | 17600                      | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o6.ts | Method  | TBLASTX:Soybean      |
| Start    | 6444                       | End     | 6647                 |
| GI       | none                       | Score   | 174                  |
| Exons    | 6444..6647, 6445..6633     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o1.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 6736   | End     | 7163                 |
| GI       | none   | Score   | 358                  |
| Exons    | 6736..6786, 6738..7160, 6739..7161, 6789..7163 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 6801   | End     | 9675                 |
| GI       | none   | Score   | 225                  |
| Exons    | 6801..7013, 6802..7017, 7008..7214, 7024..7215, 7030..7251, 7238..7288, 7249..7275, 7292..7357, 7343..7645, 7354..7644, 7463..7657, 7633..7734, 7640..7759, 7837..8052, 7851..8051, 7854..8066, 7856..8065, 8036..8239, 8037..8198, 8050..8241, 8102..8236, 9452..9622, 9453..9626, 9454..9675 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 6801   | End     | 7321                 |
| GI       | none   | Score   | 204                  |
| Exons    | 6801..7013, 6802..7005, 7008..7217, 7021..7215, 7030..7224, 7035..7223, 7239..7280, 7240..7272, 7283..7321 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 7242   | End     | 7606                 |
| GI       | none   | Score   | 60                   |
| Exons    | 7242..7277, 7243..7281, 7251..7319, 7261..7317, 7263..7319, 7328..7606, 7328..7603, 7345..7605 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o5.tc   | Method  | TBLASTX:Cress        |
| Start    | 7347   | End     | 7734                 |
| GI       | none   | Score   | 92                   |
| Exons    | 7347..7535, 7348..7551, 7355..7552, 7366..7566, 7552..7644, 7553..7645, 7553..7657, 7620..7652, 7633..7734, 7651..7731 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22556 | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960 | Strand  | -                    |



|       |  |        |               |
|-------|--|--------|---------------|
| Start | 17600  | End    | 18975         |
| Name  | OJ990415_11.9A07.C14.o2.tm   | Method | TBLASTX:Maize |
| Start | 7495   | End    | 9321          |
| GI    | none   | Score  | 84            |
| Exons | 7495..7566, 7495..7539, 7496..7540, 7540..7806, 7541..7798, 7620..7799, 7647..7832, 7705..8061, 7731..8066, 7825..8052, 7838..8065, 8036..8239, 8037..8198, 8050..8241, 8056..8235, 9265..9321 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o4.tw   | Method  | TBLASTX:Wheat        |
| Start    | 7759   | End     | 8150                 |
| GI       | none   | Score   | 81                   |
| Exons    | 7759..7854, 7759..7815, 7761..7835, 7767..8051, 7825..8052, 7832..8059, 7836..8066, 7838..8065, 8036..8149, 8037..8150 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o4.tc   | Method  | TBLASTX:Cress        |
| Start    | 7768   | End     | 8239                 |
| GI       | none   | Score   | 48                   |
| Exons    | 7768..7800, 7920..8051, 7921..8061, 7931..8065, 7935..8066, 8036..8239, 8037..8195, 8051..8233 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o5.tw   | Method  | TBLASTX:Wheat        |
| Start    | 8182   | End     | 8579                 |
| GI       | none   | Score   | 125                  |
| Exons    | 8182..8256, 8183..8257, 8227..8352, 8253..8357, 8257..8352, 8262..8387, 8371..8394, 8373..8396, 8396..8440, 8447..8506, 8448..8507, 8449..8508, 8546..8578, 8547..8579 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o6.tm   | Method  | TBLASTX:Maize        |
| Start    | 8543   | End     | 8842                 |
| GI       | none   | Score   | 157                  |
| Exons    | 8543..8659, 8544..8660, 8551..8661, 8553..8711, 8554..8703, 8647..8793, 8648..8830, 8657..8842 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No. | 46960  | Strand  | -                    |
| Start    | 17600  | End     | 18975                |
| Name     | OJ990415_11.9A07.C14.o7.tc   | Method  | TBLASTX:Cress        |
| Start    | 8582   | End     | 9629                 |
| GI       | none   | Score   | 50                   |
| Exons    | 8582..8623, 8590..8613, 8661..8705, 8661..8705, 8699..8788, 8702..8794, 8914..8940, 8936..8980, 9087..9149, 9268..9315, 9272..9298, 9395..9628, 9437..9622, 9438..9629, 9549..9626 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22556 | Seq. ID | OJ990415_11.9A07.C14 |
|----------|-------|---------|----------------------|

Gene No. 46960 Strand -  
 Start 17600 End 18975  
 Name OJ990415\_11.9A07.C14.o2.tw Method TBLASTX:Wheat  
 Start 8667 End 9231  
 GI none Score 65  
 Exons 8667..8729, 8667..8816, 8668..8817, 8669..8851, 8822..8875,  
 8824..8877, 8872..8979, 8879..8974, 8879..8980, 8986..9042,  
 8989..9081, 9034..9081, 9061..9171, 9063..9221, 9067..9231,  
 9081..9221

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14  
 Gene No. 46960 Strand -  
 Start 17600 End 18975  
 Name OJ990415\_11.9A07.C14.o5.tm Method TBLASTX:Maize  
 Start 8899 End 9220  
 GI none Score 60  
 Exons 8899..8943, 8908..8940, 8933..8980, 8937..8981, 8938..9042,  
 8938..9045, 9031..9081, 9034..9081, 9055..9171, 9071..9193,  
 9084..9209, 9161..9220

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14  
 Gene No. 46960 Strand -  
 Start 17600 End 18975  
 Name OJ990415\_11.9A07.C14.o4.tm Method TBLASTX:Maize  
 Start 9374 End 9635  
 GI none Score 241  
 Exons 9374..9634, 9376..9579, 9396..9635

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14  
 Gene No. 46960 Strand -  
 Start 17600 End 18975  
 Name OJ990415\_11.9A07.C14.o3.ts Method TBLASTX:Soybean  
 Start 13019 End 15276  
 GI none Score 198  
 Exons 13019..13183, 13044..13184, 13296..13445, 13299..13445,  
 13300..13446, 15202..15276, 15203..15274

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14  
 Gene No. 46960 Strand -  
 Start 17600 End 18975  
 Name OJ990415\_11.9A07.C14.o3.tm Method TBLASTX:Maize  
 Start 13037 End 15277  
 GI none Score 166  
 Exons 13037..13183, 13038..13184, 13296..13508, 13297..13449,  
 15202..15276, 15203..15277

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14  
 Gene No. 46960 Strand -  
 Start 17600 End 18975  
 Name OJ990415\_11.9A07.C14.o3.tc Method TBLASTX:Cress  
 Start 13041 End 15289  
 GI none Score 187  
 Exons 13041..13184, 13042..13182, 13043..13225, 13043..13183,  
 13296..13457, 13297..13452, 13311..13493, 15200..15289,  
 15202..15273

Seq. No. 22556 Seq. ID OJ990415\_11.9A07.C14

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 46960  | Strand  | -                    |
| Start       | 17600  | End     | 18975                |
| Name        | OJ990415_11.9A07.C14.o6.gs   | Method  | GENSCAN              |
| Start       | 17600  | End     | 18904                |
| GI          | none   | Score   | 1                    |
| Exons       | 17600..18904   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46960  | Strand  | -                    |
| Start       | 17600  | End     | 18975                |
| Name        | OJ990415_11.9A07.C14.o11.np  | Method  | AAT/NAP              |
| Start       | 17612  | End     | 18975                |
| GI          | 3924606  | Score   | 1499                 |
| Exons       | 17612..18975   |         |                      |
| GI Descrip. | (AF069442) hypothetical protein [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46960  | Strand  | -                    |
| Start       | 17600  | End     | 18975                |
| Name        | OJ990415_11.9A07.C14.o5.ts   | Method  | TBLASTX:Soybean      |
| Start       | 17617  | End     | 17904                |
| GI          | none   | Score   | 35                   |
| Exons       | 17617..17634, 17687..17899, 17694..17879, 17695..17904   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46960  | Strand  | -                    |
| Start       | 17600  | End     | 18975                |
| Name        | OJ990415_11.9A07.C14.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 18149  | End     | 18793                |
| GI          | none   | Score   | 250                  |
| Exons       | 18149..18418, 18173..18517, 18284..18625, 18389..18793, 18390..18788                             |         |                      |
|             |  |         |                      |
| Seq. No.    | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46960  | Strand  | -                    |
| Start       | 17600  | End     | 18975                |
| Name        | OJ990415_11.9A07.C14.o2.ts   | Method  | TBLASTX:Soybean      |
| Start       | 18149  | End     | 18907                |
| GI          | none   | Score   | 58                   |
| Exons       | 18149..18418, 18227..18526, 18320..18634, 18428..18907, 18438..18503, 18533..18718, 18660..18812 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22556  | Seq. ID | OJ990415_11.9A07.C14 |
| Gene No.    | 46960  | Strand  | -                    |
| Start       | 17600  | End     | 18975                |
| Name        | OJ990415_11.9A07.C14.o8.tm   | Method  | TBLASTX:Maize        |
| Start       | 18170  | End     | 18793                |
| GI          | none   | Score   | 128                  |
| Exons       | 18170..18418, 18386..18640, 18494..18793, 18539..18715, 18561..18788                             |         |                      |
|             |  |         |                      |
| Seq. No.    | 22557  | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No.    | 46961  | Strand  | +                    |
| Start       | 4189   | End     | 14723                |
| Name        | OJ990415_11.9A07.C15.o1.np   | Method  | AAT/NAP              |
| Start       | 4189   | End     | 7284                 |
| GI          | 5902445  | Score   | 3020                 |

Exons 4189..6025, 6065..7284  
GI Descrip. (AB030283) GAG-POL precursor [Oryza sativa]

Seq. No. 22557 Seq. ID OJ990415\_11.9A07.C15  
Gene No. 46961 Strand +  
Start 4189 End 14723  
Name OJ990415\_11.9A07.C15.o3.np Method AAT/NAP  
Start 6242 End 14723  
GI 465445 Score 71  
Exons 6242..6276, 8954..9029, 9210..9438, 9808..9864, 13828..13926,  
14154..14182, 14304..14723  
GI Descrip. PROBABLE NUCLEAR ANTIGEN gi|418708|pir||B45344 probable nuclear  
antigen - suid herpesvirus 1 (strain Kaplan) gi|334072 (M34651)  
ORF-3 protein [Pseudorabies virus]

Seq. No. 22557 Seq. ID OJ990415\_11.9A07.C15  
Gene No. 46962 Strand -  
Start 7898 End 14621  
Name OJ990415\_11.9A07.C15.o5.tm Method TBLASTX:Maize  
Start 2504 End 2740  
GI none Score 183  
Exons 2504..2740

Seq. No. 22557 Seq. ID OJ990415\_11.9A07.C15  
Gene No. 46962 Strand -  
Start 7898 End 14621  
Name OJ990415\_11.9A07.C15.o7.tw Method TBLASTX:Wheat  
Start 2504 End 2902  
GI none Score 251  
Exons 2504..2902

Seq. No. 22557 Seq. ID OJ990415\_11.9A07.C15  
Gene No. 46962 Strand -  
Start 7898 End 14621  
Name OJ990415\_11.9A07.C15.o4.tw Method TBLASTX:Wheat  
Start 3485 End 12991  
GI none Score 145  
Exons 3485..3667, 3493..3594, 3704..3940, 3706..3930, 12866..12991

Seq. No. 22557 Seq. ID OJ990415\_11.9A07.C15  
Gene No. 46962 Strand -  
Start 7898 End 14621  
Name OJ990415\_11.9A07.C15.o1.tw Method TBLASTX:Wheat  
Start 4134 End 4590  
GI none Score 544  
Exons 4134..4589, 4135..4590

Seq. No. 22557 Seq. ID OJ990415\_11.9A07.C15  
Gene No. 46962 Strand -  
Start 7898 End 14621  
Name OJ990415\_11.9A07.C15.o2.ts Method TBLASTX:Soybean  
Start 4174 End 4539  
GI none Score 98  
Exons 4174..4398, 4405..4539

Seq. No. 22557 Seq. ID OJ990415\_11.9A07.C15  
Gene No. 46962 Strand -

|          |  |         |                      |
|----------|--|---------|----------------------|
| Start    | 7898   | End     | 14621                |
| Name     | OJ990415_11.9A07.C15.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 4264   | End     | 4620                 |
| GI       | none   | Score   | 409                  |
| Exons    | 4264..4620, 4318..4494, 4326..4619                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22557  | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No. | 46962  | Strand  | -                    |
| Start    | 7898   | End     | 14621                |
| Name     | OJ990415_11.9A07.C15.o2.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 4648   | End     | 5031                 |
| GI       | none   | Score   | 308                  |
| Exons    | 4648..5031, 4815..4931                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22557  | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No. | 46962  | Strand  | -                    |
| Start    | 7898   | End     | 14621                |
| Name     | OJ990415_11.9A07.C15.o2.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 4705   | End     | 5129                 |
| GI       | none   | Score   | 432                  |
| Exons    | 4705..5127, 4745..4846, 4815..4955, 4998..5129             |         |                      |
|          |  |         |                      |
| Seq. No. | 22557  | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No. | 46962  | Strand  | -                    |
| Start    | 7898   | End     | 14621                |
| Name     | OJ990415_11.9A07.C15.o1.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 4759   | End     | 5184                 |
| GI       | none   | Score   | 291                  |
| Exons    | 4759..5184, 4818..4943                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22557  | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No. | 46962  | Strand  | -                    |
| Start    | 7898   | End     | 14621                |
| Name     | OJ990415_11.9A07.C15.o6.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 5274   | End     | 5682                 |
| GI       | none   | Score   | 212                  |
| Exons    | 5274..5501, 5275..5499, 5509..5682, 5538..5678, 5611..5682 |         |                      |
|          |  |         |                      |
| Seq. No. | 22557  | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No. | 46962  | Strand  | -                    |
| Start    | 7898   | End     | 14621                |
| Name     | OJ990415_11.9A07.C15.o8.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 5736   | End     | 5979                 |
| GI       | none   | Score   | 178                  |
| Exons    | 5736..5975, 5737..5979                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22557  | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No. | 46962  | Strand  | -                    |
| Start    | 7898   | End     | 14621                |
| Name     | OJ990415_11.9A07.C15.o3.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 6184   | End     | 6465                 |
| GI       | none   | Score   | 46                   |
| Exons    | 6184..6234, 6234..6464, 6235..6465                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22557  | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No. | 46962  | Strand  | -                    |
| Start    | 7898   | End     | 14621                |

|       |                                    |        |               |
|-------|------------------------------------|--------|---------------|
| Name  | OJ990415_11.9A07.C15.o5.tw         | Method | TBLASTX:Wheat |
| Start | 6291                               | End    | 6645          |
| GI    | none                               | Score  | 354           |
| Exons | 6291..6347, 6292..6645, 6393..6635 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22557  | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No. | 46962  | Strand  | -                    |
| Start    | 7898   | End     | 14621                |
| Name     | OJ990415_11.9A07.C15.o3.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 6664   | End     | 7275                 |
| GI       | none   | Score   | 344                  |
| Exons    | 6664..6747, 6667..7119, 6816..6923, 7147..7275, 7149..7274 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22557                      | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No. | 46962                      | Strand  | -                    |
| Start    | 7898                       | End     | 14621                |
| Name     | OJ990415_11.9A07.C15.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 6973                       | End     | 7239                 |
| GI       | none                       | Score   | 138                  |
| Exons    | 6973..7155, 7156..7239     |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22557   | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No. | 46962   | Strand  | -                    |
| Start    | 7898  | End     | 14621                |
| Name     | OJ990415_11.9A07.C15.o2.gs  | Method  | GENSCAN              |
| Start    | 7898  | End     | 14621                |
| GI       | none  | Score   | .49                  |
| Exons    | 7898..8415, 8488..8652, 8811..9511, 9516..9640, 9712..9846, 9958..10082, 10250..10963, 11197..11273, 11307..11370, 11489..11575, 11770..11876, 12993..13065, 13806..13931, 14148..14241, 14335..14414, 14519..14621 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22557   | Seq. ID | OJ990415_11.9A07.C15 |
| Gene No.    | 46962   | Strand  | -                    |
| Start       | 7898  | End     | 14621                |
| Name        | OJ990415_11.9A07.C15.o2.np  | Method  | AAT/NAP              |
| Start       | 8749  | End     | 12925                |
| GI          | 6721561   | Score   | 1084                 |
| Exons       | 8749..9507, 9578..9640, 9712..9874, 12839..12925  |         |                      |
| GI Descrip. | (AP001073) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]<br>gi 6815086 dbj BAA90372.1  (AP001081) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa] |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22558                              | Seq. ID | OJ990415_11.9A07.C16 |
| Gene No. | 46963                              | Strand  | +                    |
| Start    | 2548                               | End     | 6549                 |
| Name     | OJ990415_11.9A07.C16.o1.gs         | Method  | GENSCAN              |
| Start    | 2548                               | End     | 6549                 |
| GI       | none                               | Score   | .93                  |
| Exons    | 2548..3700, 6095..6220, 6446..6549 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22558                      | Seq. ID | OJ990415_11.9A07.C16 |
| Gene No. | 46964                      | Strand  | -                    |
| Start    | 6960                       | End     | 7746                 |
| Name     | OJ990415_11.9A07.C16.o1.tm | Method  | TBLASTX:Maize        |

|       |  |       |      |
|-------|--|-------|------|
| Start | 2704   | End   | 3141 |
| GI    | none   | Score | 49   |
| Exons | 2704..2760, 2770..2919, 2799..2918, 2919..3140, 2920..3141 |       |      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22558  | Seq. ID | OJ990415_11.9A07.C16 |
| Gene No. | 46964  | Strand  | -                    |
| Start    | 6960   | End     | 7746                 |
| Name     | OJ990415_11.9A07.C16.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 3444   | End     | 3718                 |
| GI       | none   | Score   | 53                   |
| Exons    | 3444..3503, 3445..3504, 3508..3699, 3512..3718, 3516..3650, 3523..3714 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22558                      | Seq. ID | OJ990415_11.9A07.C16 |
| Gene No. | 46964                      | Strand  | -                    |
| Start    | 6960                       | End     | 7746                 |
| Name     | OJ990415_11.9A07.C16.o2.gs | Method  | GENSCAN              |
| Start    | 6960                       | End     | 7746                 |
| GI       | none                       | Score   | .83                  |
| Exons    | 6960..7284, 7691..7746     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22559  | Seq. ID | OJ990415_11.9A07.C17 |
| Gene No.    | 46965  | Strand  | -                    |
| Start       | 166  | End     | 448                  |
| Name        | OJ990415_11.9A07.C17.o1.np                             | Method  | AAT/NAP              |
| Start       | 166  | End     | 448                  |
| GI          | 6016698  | Score   | 281                  |
| Exons       | 166..448   |         |                      |
| GI Descrip. | (AC009991) hypothetical protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22559                      | Seq. ID | OJ990415_11.9A07.C17 |
| Gene No. | 46966                      | Strand  | -                    |
| Start    | 7256                       | End     | 7729                 |
| Name     | OJ990415_11.9A07.C17.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 165                        | End     | 303                  |
| GI       | none                       | Score   | 128                  |
| Exons    | 165..302, 166..303         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22559  | Seq. ID | OJ990415_11.9A07.C17 |
| Gene No. | 46966  | Strand  | -                    |
| Start    | 7256   | End     | 7729                 |
| Name     | OJ990415_11.9A07.C17.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 3624   | End     | 4025                 |
| GI       | none   | Score   | 107                  |
| Exons    | 3624..3803, 3804..3842, 3806..3874, 3867..3962, 3869..4021, 3888..4025 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22559  | Seq. ID | OJ990415_11.9A07.C17 |
| Gene No. | 46966  | Strand  | -                    |
| Start    | 7256   | End     | 7729                 |
| Name     | OJ990415_11.9A07.C17.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 4323   | End     | 4627                 |
| GI       | none   | Score   | 44                   |
| Exons    | 4323..4382, 4325..4381, 4386..4472, 4391..4468, 4479..4625, 4499..4627 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22559 | Seq. ID | OJ990415_11.9A07.C17 |
|----------|-------|---------|----------------------|

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 46966  | Strand  | -                    |
| Start       | 7256   | End     | 7729                 |
| Name        | OJ990415_11.9A07.C17.o2.gs                                 | Method  | GENSCAN              |
| Start       | 7256   | End     | 7633                 |
| GI          | none   | Score   | .46                  |
| Exons       | 7256..7633   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22559  | Seq. ID | OJ990415_11.9A07.C17 |
| Gene No.    | 46966  | Strand  | -                    |
| Start       | 7256   | End     | 7729                 |
| Name        | OJ990415_11.9A07.C17.o3.np                                 | Method  | AAT/NAP              |
| Start       | 7256   | End     | 7729                 |
| GI          | 285741   | Score   | 404                  |
| Exons       | 7256..7729   |         |                      |
| GI Descrip. | (D14550) EDGP precursor [Daucus carota]                    |         |                      |
|             |  |         |                      |
| Seq. No.    | 22559  | Seq. ID | OJ990415_11.9A07.C17 |
| Gene No.    | 46966  | Strand  | -                    |
| Start       | 7256   | End     | 7729                 |
| Name        | OJ990415_11.9A07.C17.o1.tc                                 | Method  | TBLASTX:Cress        |
| Start       | 7268   | End     | 7712                 |
| GI          | none   | Score   | 34                   |
| Exons       | 7268..7600, 7306..7380, 7368..7580, 7596..7712; 7598..7696 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22559  | Seq. ID | OJ990415_11.9A07.C17 |
| Gene No.    | 46966  | Strand  | -                    |
| Start       | 7256   | End     | 7729                 |
| Name        | OJ990415_11.9A07.C17.o1.ts                                 | Method  | TBLASTX:Soybean      |
| Start       | 7268   | End     | 7729                 |
| GI          | none   | Score   | 108                  |
| Exons       | 7268..7426, 7395..7580, 7442..7597, 7596..7724, 7598..7729 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46967  | Strand  | +                    |
| Start       | 1408   | End     | 2401                 |
| Name        | OJ990415_11.9A07.C18.o1.gs                                 | Method  | GENSCAN              |
| Start       | 1408   | End     | 2401                 |
| GI          | none   | Score   | .92                  |
| Exons       | 1408..1553, 1726..1816, 2360..2401                         |         |                      |
|             |  |         |                      |
| Seq. No.    | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46968  | Strand  | +                    |
| Start       | 3039   | End     | 3944                 |
| Name        | OJ990415_11.9A07.C18.o2.gs                                 | Method  | GENSCAN              |
| Start       | 3039   | End     | 3944                 |
| GI          | none   | Score   | .69                  |
| Exons       | 3039..3196, 3742..3822, 3881..3944                         |         |                      |
|             |  |         |                      |
| Seq. No.    | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46969  | Strand  | +                    |
| Start       | 7077   | End     | 7634                 |
| Name        | OJ990415_11.9A07.C18.o4.gs                                 | Method  | GENSCAN              |
| Start       | 7077   | End     | 7634                 |
| GI          | none   | Score   | .64                  |
| Exons       | 7077..7283, 7596..7634                                     |         |                      |
|             |  |         |                      |
| Seq. No.    | 22560  | Seq. ID | OJ990415_11.9A07.C18 |



|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 46970  | Strand | +       |
| Start       | 11637  | End    | 11971   |
| Name        | OJ990415_11.9A07.C18.o1.gp   | Method | AAT/GAP |
| Start       | 11637  | End    | 11971   |
| GI          | uC-osroM202027h09a1  | Score  | 623     |
| Exons       | 11637..11971   |        |         |
| GI Descrip. | '285741/dbj BAA03413  9.0e-22 (D14550) EDGP precursor [Daucus carota]' |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22560                      | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46971                      | Strand  | +                    |
| Start    | 18201                      | End     | 18817                |
| Name     | OJ990415_11.9A07.C18.o8.gs | Method  | GENSCAN              |
| Start    | 18201                      | End     | 18817                |
| GI       | none                       | Score   | .49                  |
| Exons    | 18201..18292, 18700..18817 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46972  | Strand  | +                    |
| Start       | 18746  | End     | 35289                |
| Name        | OJ990415_11.9A07.C18.o3.np   | Method  | AAT/NAP              |
| Start       | 18746  | End     | 35094                |
| GI          | 5052554  | Score   | 1558                 |
| Exons       | 18746..18770, 20746..20786, 20890..21001, 21104..21284, 22662..22734, 22815..22987, 23078..23278, 23987..24064, 24462..24572, 24651..24737, 24836..25018, 25099..25149, 25223..25348, 25452..25531, 26109..26185, 28633..28811, 31147..31212, 31307..31378, 31589..31752, 32477..32588, 32991..33107, 34047..34121, 34164..35094 |         |                      |
| GI Descrip. | (AF145632) BcDNA.GH06032 [Drosophila melanogaster]   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46972  | Strand  | +                    |
| Start    | 18746  | End     | 35289                |
| Name     | OJ990415_11.9A07.C18.o9.gs   | Method  | GENSCAN              |
| Start    | 20554  | End     | 35119                |
| GI       | none   | Score   | .73                  |
| Exons    | 20554..20739, 20866..20997, 21082..21284, 22662..22734, 22815..22987, 23078..23138, 23960..24064, 24651..24737, 25099..25149, 25223..25348, 25452..25531, 26109..26217, 26899..27393, 27486..27787, 27910..28041, 28137..28255, 28633..28811, 31589..31737, 32477..32588, 32991..33107, 34047..34650, 34686..35119 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22560   | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46972   | Strand  | +                    |
| Start       | 18746   | End     | 35289                |
| Name        | OJ990415_11.9A07.C18.o2.gp  | Method  | AAT/GAP              |
| Start       | 34880   | End     | 35289                |
| GI          | LIB3433-026-P1-K1-E11   | Score   | 793                  |
| Exons       | 34880..35289  |         |                      |
| GI Descrip. | '5441872/dbj AP000366.1 AP000366 2.0e-21 Oryza sativa genomic DNA, chromosome 2, clone:P0437H03 (contig a)' |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22560 | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46973 | Strand  | +                    |
| Start    | 39573 | End     | 41078                |

|             |   |        |         |
|-------------|---|--------|---------|
| Name        | OJ990415_11.9A07.C18.o5.np  | Method | AAT/NAP |
| Start       | 39573   | End    | 41078   |
| GI          | 5441880   | Score  | 1245    |
| Exons       | 39573..40591, 40937..41078  |        |         |
| GI Descrip. | (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa] |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22560                      | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46974                      | Strand  | -                    |
| Start    | 4808                       | End     | 6128                 |
| Name     | OJ990415_11.9A07.C18.o3.gs | Method  | GENSCAN              |
| Start    | 4808                       | End     | 6128                 |
| GI       | none                       | Score   | 1                    |
| Exons    | 4808..5349, 5363..6128     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22560                      | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46975                      | Strand  | -                    |
| Start    | 9188                       | End     | 10501                |
| Name     | OJ990415_11.9A07.C18.o5.gs | Method  | GENSCAN              |
| Start    | 9188                       | End     | 10501                |
| GI       | none                       | Score   | .84                  |
| Exons    | 9188..10501                |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22560   | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46976   | Strand  | -                    |
| Start       | 11687   | End     | 13000                |
| Name        | OJ990415_11.9A07.C18.o1.np  | Method  | AAT/NAP              |
| Start       | 11681   | End     | 12991                |
| GI          | 3850579   | Score   | 989                  |
| Exons       | 11681..12991  |         |                      |
| GI Descrip. | (AC005278) Strong similarity to gb D14550 extracellular dermal glycoprotein (EDGP) precursor from Daucus carota. ESTs gb H37281, gb T44167, gb T21813, gb N38437, gb Z26470, gb R65072, gb N76373, gb F15470, gb Z35182, gb H76373, gb Z34678 an... |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22560                      | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46976                      | Strand  | -                    |
| Start    | 11687                      | End     | 13000                |
| Name     | OJ990415_11.9A07.C18.o6.gs | Method  | GENSCAN              |
| Start    | 11687                      | End     | 13000                |
| GI       | none                       | Score   | .52                  |
| Exons    | 11687..13000               |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560                                    | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46977                                    | Strand  | -                    |
| Start    | 13607                                    | End     | 15797                |
| Name     | OJ990415_11.9A07.C18.o7.gs               | Method  | GENSCAN              |
| Start    | 13607                                    | End     | 15797                |
| GI       | none                                     | Score   | .55                  |
| Exons    | 13607..13867, 14563..15023, 15782..15797 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22560                      | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46978                      | Strand  | -                    |
| Start    | 16765                      | End     | 19007                |
| Name     | OJ990415_11.9A07.C18.o2.np | Method  | AAT/NAP              |

|             |  |       |       |
|-------------|--|-------|-------|
| Start       | 16765  | End   | 19007 |
| GI          | 6815053  | Score | 254   |
| Exons       | 16765..16942, 18111..18344, 18853..19007       |       |       |
| GI Descrip. | (AP001080) hypothetical protein [Oryza sativa] |       |       |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46979  | Strand  | -                    |
| Start    | 36264  | End     | 38201                |
| Name     | OJ990415_11.9A07.C18.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 4817   | End     | 12950                |
| GI       | none   | Score   | 178                  |
| Exons    | 4817..5164, 4920..5165, 5148..5264, 5153..5260, 5276..5350, 5316..5351, 5370..5411, 5415..5471, 5490..5642, 5491..5625, 5676..5768, 5832..6023, 5869..5976, 9200..9319, 9302..9547, 9303..9524, 9531..9647, 9536..9634, 9659..9796, 9699..9782, 9800..9865, 9875..10045, 9876..10046, 10019..10186, 10044..10187, 10193..10411, 10254..10412, 11699..12043, 11700..12020, 12032..12130, 12155..12289, 12162..12278, 12293..12349, 12368..12547, 12369..12548, 12536..12679, 12537..12665, 12680..12901, 12747..12950 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46979  | Strand  | -                    |
| Start    | 36264  | End     | 38201                |
| Name     | OJ990415_11.9A07.C18.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4817   | End     | 12950                |
| GI       | none   | Score   | 62                   |
| Exons    | 4817..4987, 4920..4988, 4985..5167, 4986..5210, 5168..5338, 5168..5350, 5172..5351, 5370..5516, 5487..5768, 5491..5799, 5826..6023, 5887..5976, 9200..9319, 9300..9524, 9380..9550, 9551..9790, 9555..9791, 9797..9901, 9875..10186, 9876..10184, 10187..10411, 10206..10451, 11699..11857, 11700..11852, 11868..12020, 11873..12046, 12032..12361, 12047..12262, 12141..12350, 12368..12679, 12369..12677, 12686..12943, 12699..12950 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46979  | Strand  | -                    |
| Start    | 36264  | End     | 38201                |
| Name     | OJ990415_11.9A07.C18.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 20506  | End     | 20801                |
| GI       | none   | Score   | 186                  |
| Exons    | 20506..20703, 20545..20595, 20562..20705, 20668..20712, 20747..20800, 20763..20801 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46979  | Strand  | -                    |
| Start    | 36264  | End     | 38201                |
| Name     | OJ990415_11.9A07.C18.o6.tm   | Method  | TBLASTX:Maize        |
| Start    | 28742  | End     | 34175                |
| GI       | none   | Score   | 112                  |
| Exons    | 28742..28816, 28743..28817, 31147..31227, 31151..31213, 31302..31379, 31306..31386, 31307..31381, 31581..31736, 31588..31737, 31589..31735, 32458..32589, 32474..32590, 32475..32591, 32982..33107, 32990..33109, 32990..33106, 33067..33129, 34044..34130, 34052..34117, 34112..34174, 34113..34175 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22560   | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46979   | Strand  | -                    |
| Start       | 36264   | End     | 38201                |
| Name        | OJ990415_11.9A07.C18.o2.ts  | Method  | TBLASTX:Soybean      |
| Start       | 33023   | End     | 35120                |
| GI          | none  | Score   | 137                  |
| Exons       | 33023..33106, 33024..33107, 33032..33109, 33064..33108, 34044..34154, 34092..34676, 34307..34678, 34314..34688, 34638..35075, 34656..34856, 34667..35110, 34669..35115, 34908..35120  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22560   | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46979   | Strand  | -                    |
| Start       | 36264   | End     | 38201                |
| Name        | OJ990415_11.9A07.C18.o2.tm  | Method  | TBLASTX:Maize        |
| Start       | 34199   | End     | 34624                |
| GI          | none  | Score   | 643                  |
| Exons       | 34199..34624; 34227..34622, 34351..34623  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22560   | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46979   | Strand  | -                    |
| Start       | 36264   | End     | 38201                |
| Name        | OJ990415_11.9A07.C18.o3.tc  | Method  | TBLASTX:Cress        |
| Start       | 34284   | End     | 34759                |
| GI          | none  | Score   | 597                  |
| Exons       | 34284..34676, 34292..34678, 34298..34678, 34667..34759, 34687..34758  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22560   | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46979   | Strand  | -                    |
| Start       | 36264   | End     | 38201                |
| Name        | OJ990415_11.9A07.C18.o5.tm  | Method  | TBLASTX:Maize        |
| Start       | 34625   | End     | 34834                |
| GI          | none  | Score   | 79                   |
| Exons       | 34625..34678, 34626..34676, 34667..34834, 34672..34833  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22560   | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46979   | Strand  | -                    |
| Start       | 36264   | End     | 38201                |
| Name        | OJ990415_11.9A07.C18.o4.tm  | Method  | TBLASTX:Maize        |
| Start       | 34910   | End     | 35126                |
| GI          | none  | Score   | 352                  |
| Exons       | 34910..35122, 34910..35125, 34911..35126  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22560   | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46979   | Strand  | -                    |
| Start       | 36264   | End     | 38201                |
| Name        | OJ990415_11.9A07.C18.o3.gp  | Method  | AAT/GAP              |
| Start       | 36085   | End     | 38201                |
| GI          | 253.2.R1084   | Score   | 2675                 |
| Exons       | 36085..37312, 38060..38201  |         |                      |
| GI Descrip. | '113622/sp P17784 ALF_ORYSA 0.0e+00 FRUCTOSE-BISPHOSPHATE ALDOLASE, CYTOPLASMIC ISOZYME >gi_68197_pir_ADRZY fructose-bisphosphate aldolase (EC 4.1.2.13), cytosolic - rice >gi_20204_emb_CAA37290 (X53130) fructose-diphosphate aldolase (AA 1-358) [Oryza sativa]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46979  | Strand  | -                    |
| Start    | 36264  | End     | 38201                |
| Name     | OJ990415_11.9A07.C18.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 36220  | End     | 37325                |
| GI       | none   | Score   | 217                  |
| Exons    | 36220..36495, 36249..36482, 36459..37316, 36481..36966, 37006..37317, 37206..37325 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46979  | Strand  | -                    |
| Start    | 36264  | End     | 38201                |
| Name     | OJ990415_11.9A07.C18.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 36255  | End     | 37314                |
| GI       | none   | Score   | 50                   |
| Exons    | 36255..36299, 36258..36299, 36259..36303, 36310..36378, 36318..37127, 36318..37313, 36319..37314 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560                                    | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46979                                    | Strand  | -                    |
| Start    | 36264                                    | End     | 38201                |
| Name     | OJ990415_11.9A07.C18.o3.tw               | Method  | TBLASTX:Wheat        |
| Start    | 36258                                    | End     | 36447                |
| GI       | none                                     | Score   | 169                  |
| Exons    | 36258..36440, 36258..36446, 36259..36447 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46979  | Strand  | -                    |
| Start    | 36264  | End     | 38201                |
| Name     | OJ990415_11.9A07.C18.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 36264  | End     | 37325                |
| GI       | none   | Score   | 677                  |
| Exons    | 36264..37313, 36268..36966, 36872..36970, 37006..37314, 37206..37325, 37213..37314 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560                                    | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46979                                    | Strand  | -                    |
| Start    | 36264                                    | End     | 38201                |
| Name     | OJ990415_11.9A07.C18.o10.gs              | Method  | GENSCAN              |
| Start    | 36264                                    | End     | 38087                |
| GI       | none                                     | Score   | .98                  |
| Exons    | 36264..37312, 37947..37988, 38060..38087 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No.    | 46979  | Strand  | -                    |
| Start       | 36264  | End     | 38201                |
| Name        | OJ990415_11.9A07.C18.o4.np   | Method  | AAT/NAP              |
| Start       | 36267  | End     | 38087                |
| GI          | 113622   | Score   | 1774                 |
| Exons       | 36267..37312, 38060..38087   |         |                      |
| GI Descrip. | FRUCTOSE-BISPHOSPHATE ALDOLASE, CYTOPLASMIC ISOZYME<br>gi 68197 pir  ADRZY fructose-bisphosphate aldolase (EC<br>4.1.2.13), cytosolic - rice gi 20204 emb CAA37290  (X53130)<br>fructose-diphosphate aldolase (AA 1-358). [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22560 | Seq. ID | OJ990415_11.9A07.C18 |
|----------|-------|---------|----------------------|

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46979  | Strand | -             |
| Start    | 36264  | End    | 38201         |
| Name     | OJ990415_11.9A07.C18.o1.tw   | Method | TBLASTX:Wheat |
| Start    | 36640  | End    | 38089         |
| GI       | none   | Score  | 715           |
| Exons    | 36640..37314, 36642..37313, 37206..37325, 37265..37324, 38057..38089 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46980  | Strand  |                      |
| Start    | 40140  | End     | 40811                |
| Name     | OJ990415_11.9A07.C18.o3.tm                             | Method  | TBLASTX:Maize        |
| Start    | 40140  | End     | 40736                |
| GI       | none   | Score   | 353                  |
| Exons    | 40140..40607, 40145..40267, 40319..40618, 40665..40736 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22560  | Seq. ID | OJ990415_11.9A07.C18 |
| Gene No. | 46980  | Strand  |                      |
| Start    | 40140  | End     | 40811                |
| Name     | OJ990415_11.9A07.C18.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 40434  | End     | 40811                |
| GI       | none   | Score   | 185                  |
| Exons    | 40434..40583, 40436..40588, 40437..40613, 40638..40811, 40646..40705, 40660..40800 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22561   | Seq. ID | OJ990415_11.9A07.C19 |
| Gene No. | 46981   | Strand  | +                    |
| Start    | 58  | End     | 4237                 |
| Name     | OJ990415_11.9A07.C19.o1.gs  | Method  | GENSCAN              |
| Start    | 58  | End     | 4114                 |
| GI       | none  | Score   | .51                  |
| Exons    | 58..994, 1479..1552, 1628..1994, 2080..2302, 2375..2493, 2574..2872, 2977..3238, 3331..3438, 3485..3586, 3702..3724, 3782..3862, 3901..4114 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22561  | Seq. ID | OJ990415_11.9A07.C19 |
| Gene No. | 46981  | Strand  | +                    |
| Start    | 58   | End     | 4237                 |
| Name     | OJ990415_11.9A07.C19.o1.np   | Method  | AAT/NAP              |
| Start    | 166  | End     | 4237                 |
| GI       | 5441880  | Score   | 1505                 |
| Exons    | 166..226, 485..811, 1413..1552, 1661..1994, 2574..2872, 2977..3238, 3311..3555, 4028..4237 |         |                      |

GI Descrip. (AP000367) EST C28952(C62945) corresponds to a region of the predicted gene.; Similar to maize transposon MuDR mudrA protein. (AC003981) [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22561                      | Seq. ID | OJ990415_11.9A07.C19 |
| Gene No. | 46981                      | Strand  | +                    |
| Start    | 58                         | End     | 4237                 |
| Name     | OJ990415_11.9A07.C19.o1.gp | Method  | AAT/GAP              |
| Start    | 1667                       | End     | 3917                 |
| GI       | LIB3433-020-P1-K1-A6       | Score   | 766                  |
| Exons    | 1667..1709, 3531..3917     |         |                      |

GI Descrip. '5670155/gb|AF161269.1|AF161269 2.0e-35 Oryza sativa subsp. japonica BAC clone 34K24, complete sequence'

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22561  | Seq. ID | OJ990415_11.9A07.C19 |
| Gene No. | 46982  | Strand  | -                    |
| Start    | 4762   | End     | 5248                 |
| Name     | OJ990415_11.9A07.C19.o1.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 1719   | End     | 1901                 |
| GI       | none   | Score   | 92                   |
| Exons    | 1719..1772, 1733..1783, 1781..1900, 1782..1901 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22561  | Seq. ID | OJ990415_11.9A07.C19 |
| Gene No.    | 46982  | Strand  | -                    |
| Start       | 4762   | End     | 5248                 |
| Name        | OJ990415_11.9A07.C19.o2.np   | Method  | AAT/NAP              |
| Start       | 4762   | End     | 5248                 |
| GI          | 5295955  | Score   | 149                  |
| Exons       | 4762..4872, 4900..5248   |         |                      |
| GI Descrip. | (AB026295) Similar to Epstein-Barr virus (EBV) genome.(V01555)<br>[Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22562                      | Seq. ID | OJ990415_11.9A07.C20 |
| Gene No. | 46983                      | Strand  | +                    |
| Start    | 134                        | End     | 551                  |
| Name     | OJ990415_11.9A07.C20.o1.gs | Method  | GENSCAN              |
| Start    | 134                        | End     | 551                  |
| GI       | none                       | Score   | .48                  |
| Exons    | 134..216, 300..551         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22562  | Seq. ID | OJ990415_11.9A07.C20 |
| Gene No.    | 46984  | Strand  | -                    |
| Start       | 1  | End     | 2014                 |
| Name        | OJ990415_11.9A07.C20.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 2014                 |
| GI          | 5295955  | Score   | 312                  |
| Exons       | 1..497, 542..607, 1288..1402, 1945..2014   |         |                      |
| GI Descrip. | (AB026295) Similar to Epstein-Barr virus (EBV) genome.(V01555)<br>[Oryza sativa] |         |                      |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22562                            | Seq. ID | OJ990415_11.9A07.C20 |
| Gene No. | 46984                            | Strand  | -                    |
| Start    | 1                                | End     | 2014                 |
| Name     | OJ990415_11.9A07.C20.o2.gs       | Method  | GENSCAN              |
| Start    | 783                              | End     | 1558                 |
| GI       | none                             | Score   | .43                  |
| Exons    | 783..864, 1288..1402, 1549..1558 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22563                      | Seq. ID | OJ990415_11.9A07.C21 |
| Gene No. | 46985                      | Strand  | +                    |
| Start    | 1455                       | End     | 1524                 |
| Name     | OJ990415_11.9A07.C21.o1.gs | Method  | GENSCAN              |
| Start    | 1455                       | End     | 1524                 |
| GI       | none                       | Score   | .57                  |
| Exons    | 1455..1524                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22563                      | Seq. ID | OJ990415_11.9A07.C21 |
| Gene No. | 46986                      | Strand  | +                    |
| Start    | 4444                       | End     | 6079                 |
| Name     | OJ990415_11.9A07.C21.o1.gp | Method  | AAT/GAP              |
| Start    | 4376                       | End     | 6079                 |

GI 2535\_1.R1084 Score 1192  
 Exons 4376..4753, 5752..5865, 5952..6079  
 GI Descrip. '3892058/gb|AAC78271.1|AAC78271 7.0e-54 (AC002330) putative glutamate-/aspartate-binding peptide [Arabidopsis thaliana]'

Seq. No. 22563 Seq. ID OJ990415\_11.9A07.C21  
 Gene No. 46986 Strand +  
 Start 4444 End 6079  
 Name OJ990415\_11.9A07.C21.o3.gs Method GENSCAN  
 Start 4444 End 5865  
 GI none Score .79  
 Exons 4444..4753, 5752..5865

Seq. No. 22563 Seq. ID OJ990415\_11.9A07.C21  
 Gene No. 46986 Strand +  
 Start 4444 End 6079  
 Name OJ990415\_11.9A07.C21.o2.np Method AAT/NAP  
 Start 4474 End 6079  
 GI 2244904 Score 386  
 Exons 4474..4900, 5747..6079  
 GI Descrip. (Z97339) hypothetical protein [Arabidopsis thaliana]

Seq. No. 22563 Seq. ID OJ990415\_11.9A07.C21  
 Gene No. 46987 Strand -  
 Start 1 End 1096  
 Name OJ990415\_11.9A07.C21.o1.np Method AAT/NAP  
 Start 1 End 1096  
 GI 6721547 Score 96  
 Exons 1..145, 1012..1096  
 GI Descrip. (AP001073) Similar to Oryza sativa gene for Pib. (AB013448)

Seq. No. 22563 Seq. ID OJ990415\_11.9A07.C21  
 Gene No. 46988 Strand -  
 Start 2978 End 3582  
 Name OJ990415\_11.9A07.C21.o2.gs Method GENSCAN  
 Start 2978 End 3582  
 GI none Score .56  
 Exons 2978..3093, 3366..3582

Seq. No. 22563 Seq. ID OJ990415\_11.9A07.C21  
 Gene No. 46989 Strand -  
 Start 4465 End 6079  
 Name OJ990415\_11.9A07.C21.o1.tw Method TBLASTX:Wheat  
 Start 4465 End 5861  
 GI none Score 352  
 Exons 4465..4752, 4482..4757, 5735..5860, 5736..5861, 5754..5861

Seq. No. 22563 Seq. ID OJ990415\_11.9A07.C21  
 Gene No. 46989 Strand -  
 Start 4465 End 6079  
 Name OJ990415\_11.9A07.C21.o1.ts Method TBLASTX:Soybean  
 Start 4509 End 6079  
 GI none Score 162  
 Exons 4509..4679, 4522..4770, 5754..5867, 5777..5866, 5947..6078, 5950..6069, 5951..6079

Seq. No. 22563 Seq. ID OJ990415\_11.9A07.C21



|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 46989  | Strand |               |
| Start    | 4465   | End    | 6079          |
| Name     | OJ990415_11.9A07.C21.o1.tm                     | Method | TBLASTX:Maize |
| Start    | 5736   | End    | 6079          |
| GI       | none   | Score  | 126           |
| Exons    | 5736..5867, 5744..5866, 5948..6079, 5950..6078 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22563  | Seq. ID | OJ990415_11.9A07.C21 |
| Gene No. | 46989  | Strand  |                      |
| Start    | 4465   | End     | 6079                 |
| Name     | OJ990415_11.9A07.C21.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 5745   | End     | 6061                 |
| GI       | none   | Score   | 131                  |
| Exons    | 5745..5867, 5750..5866, 5948..6061, 5950..6060 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22564   | Seq. ID | OJ990415_11.9A07.C22 |
| Gene No.    | 46990   | Strand  | -                    |
| Start       | 1   | End     | 437                  |
| Name        | OJ990415_11.9A07.C22.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 425                  |
| GI          | 3850579   | Score   | 256                  |
| Exons       | 1..425  |         |                      |
| GI Descrip. | (AC005278) Strong similarity to gb D14550 extracellular dermal glycoprotein (EDGP) precursor from Daucus carota. ESTs gb H37281, gb T44167, gb T21813, gb N38437, gb Z26470, gb R65072, gb N76373, gb F15470, gb Z35182, gb H76373, gb Z34678 an... |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22564                      | Seq. ID | OJ990415_11.9A07.C22 |
| Gene No. | 46990                      | Strand  | -                    |
| Start    | 1                          | End     | 437                  |
| Name     | OJ990415_11.9A07.C22.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 3                          | End     | 437                  |
| GI       | none                       | Score   | 97                   |
| Exons    | 3..119, 126..437, 187..342 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22564                      | Seq. ID | OJ990415_11.9A07.C22 |
| Gene No. | 46990                      | Strand  | -                    |
| Start    | 1                          | End     | 437                  |
| Name     | OJ990415_11.9A07.C22.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 3                          | End     | 393                  |
| GI       | none                       | Score   | 117                  |
| Exons    | 3..116, 126..392, 145..393 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22564                      | Seq. ID | OJ990415_11.9A07.C22 |
| Gene No. | 46990                      | Strand  | -                    |
| Start    | 1                          | End     | 437                  |
| Name     | OJ990415_11.9A07.C22.o1.gs | Method  | GENSCAN              |
| Start    | 15                         | End     | 434                  |
| GI       | none                       | Score   | 1                    |
| Exons    | 15..434                    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22565                      | Seq. ID | OJ990415_11.9A07.C23 |
| Gene No. | 46991                      | Strand  | +                    |
| Start    | 148                        | End     | 689                  |
| Name     | OJ990415_11.9A07.C23.o1.np | Method  | AAT/NAP              |
| Start    | 148                        | End     | 689                  |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| GI          | 6721516  | Score   | 289                  |
| Exons       | 148..388, 641..689   |         |                      |
| GI Descrip. | (AP001072) hypothetical protein [Oryza sativa]                       |         |                      |
|             |  |         |                      |
| Seq. No.    | 22565  | Seq. ID | OJ990415_11.9A07.C23 |
| Gene No.    | 46992  | Strand  | -                    |
| Start       | 361  | End     | 478                  |
| Name        | OJ990415_11.9A07.C23.ol.gs   | Method  | GENSCAN              |
| Start       | 361  | End     | 478                  |
| GI          | none   | Score   | .95                  |
| Exons       | 361..478   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22566  | Seq. ID | OJ990915_16.9A18.C2  |
| Gene No.    | 46993  | Strand  | +                    |
| Start       | 120  | End     | 1261                 |
| Name        | OJ990915_16.9A18.C2.ol.gs  | Method  | GENSCAN              |
| Start       | 120  | End     | 1261                 |
| GI          | none   | Score   | .5                   |
| Exons       | 120..214, 988..1261  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22567  | Seq. ID | OJ990915_16.9A18.C3  |
| Gene No.    | 46994  | Strand  | +                    |
| Start       | 145  | End     | 586                  |
| Name        | OJ990915_16.9A18.C3.ol.np  | Method  | AAT/NAP              |
| Start       | 145  | End     | 586                  |
| GI          | 3982612  | Score   | 432                  |
| Exons       | 145..586   |         |                      |
| GI Descrip. | (AF056150) disease resistance gene analog PIC11 [Zea mays]           |         |                      |
|             |  |         |                      |
| Seq. No.    | 22567  | Seq. ID | OJ990915_16.9A18.C3  |
| Gene No.    | 46994  | Strand  | +                    |
| Start       | 145  | End     | 586                  |
| Name        | OJ990915_16.9A18.C3.ol.gs  | Method  | GENSCAN              |
| Start       | 238  | End     | 417                  |
| GI          | none   | Score   | .77                  |
| Exons       | 238..417   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22568  | Seq. ID | OJ990915_16.9A18.C4  |
| Gene No.    | 46995  | Strand  | -                    |
| Start       | 1  | End     | 701                  |
| Name        | OJ990915_16.9A18.C4.ol.np  | Method  | AAT/NAP              |
| Start       | 1  | End     | 701                  |
| GI          | 4914413  | Score   | 154                  |
| Exons       | 1..131, 581..701   |         |                      |
| GI Descrip. | (AL050352) choline monooxygenase-like protein [Arabidopsis thaliana] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22568  | Seq. ID | OJ990915_16.9A18.C4  |
| Gene No.    | 46995  | Strand  | -                    |
| Start       | 1  | End     | 701                  |
| Name        | OJ990915_16.9A18.C4.ol.tm  | Method  | TBLASTX:Maize        |
| Start       | 1  | End     | 640                  |
| GI          | none   | Score   | 221                  |
| Exons       | 1..135, 3..137, 578..640, 582..632                                   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22568  | Seq. ID | OJ990915_16.9A18.C4  |
| Gene No.    | 46995  | Strand  | -                    |

|       |                           |        |         |
|-------|---------------------------|--------|---------|
| Start | 1                         | End    | 701     |
| Name  | OJ990915_16.9A18.C4.o1.gs | Method | GENSCAN |
| Start | 581                       | End    | 637     |
| GI    | none                      | Score  | .66     |
| Exons | 581..637                  |        |         |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22569                     | Seq. ID | OJ990915_16.9A18.C5 |
| Gene No. | 46996                     | Strand  | +                   |
| Start    | 1777                      | End     | 2773                |
| Name     | OJ990915_16.9A18.C5.o2.gs | Method  | GENSCAN             |
| Start    | 1777                      | End     | 2773                |
| GI       | none                      | Score   | .85                 |
| Exons    | 1777..1947, 2366..2773    |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22569   | Seq. ID | OJ990915_16.9A18.C5 |
| Gene No.    | 46997   | Strand  | -                   |
| Start       | 1   | End     | 2745                |
| Name        | OJ990915_16.9A18.C5.o1.np   | Method  | AAT/NAP             |
| Start       | 1   | End     | 2745                |
| GI          | 4914413   | Score   | 556                 |
| Exons       | 1..62, 304..430, 540..746, 832..906, 1368..1473, 1718..1763, 2442..2745 |         |                     |
| GI Descrip. | (AL050352) choline monooxygenase-like protein [Arabidopsis thaliana]    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22569                                  | Seq. ID | OJ990915_16.9A18.C5 |
| Gene No. | 46997                                  | Strand  | -                   |
| Start    | 1                                      | End     | 2745                |
| Name     | OJ990915_16.9A18.C5.o1.gs              | Method  | GENSCAN             |
| Start    | 30                                     | End     | 1471                |
| GI       | none                                   | Score   | .49                 |
| Exons    | 30..55, 540..746, 832..906, 1400..1471 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22569   | Seq. ID | OJ990915_16.9A18.C5 |
| Gene No. | 46998   | Strand  | -                   |
| Start    | 3125  | End     | 8171                |
| Name     | OJ990915_16.9A18.C5.o1.tm   | Method  | TBLASTX:Maize       |
| Start    | 1   | End     | 655                 |
| GI       | none  | Score   | 81                  |
| Exons    | 1..54, 1..54, 8..55, 327..431, 331..432, 338..433, 338..433, 532..648, 537..650, 538..651, 539..655 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22569  | Seq. ID | OJ990915_16.9A18.C5 |
| Gene No. | 46998  | Strand  | -                   |
| Start    | 3125   | End     | 8171                |
| Name     | OJ990915_16.9A18.C5.o2.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 1704   | End     | 2577                |
| GI       | none   | Score   | 76                  |
| Exons    | 1704..1760, 1715..1765, 1717..1764, 2440..2577, 2440..2571 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22569  | Seq. ID | OJ990915_16.9A18.C5 |
| Gene No. | 46998  | Strand  | -                   |
| Start    | 3125   | End     | 8171                |
| Name     | OJ990915_16.9A18.C5.o3.gs                                  | Method  | GENSCAN             |
| Start    | 3125   | End     | 8171                |
| GI       | none   | Score   | .61                 |
| Exons    | 3125..3229, 5210..5267, 6508..6622, 7355..7608, 7711..8171 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22569                     | Seq. ID | OJ990915_16.9A18.C5 |
| Gene No. | 46998                     | Strand  | -                   |
| Start    | 3125                      | End     | 8171                |
| Name     | OJ990915_16.9A18.C5.o1.gp | Method  | AAT/GAP             |
| Start    | 7366                      | End     | 7790                |
| GI       | none                      | Score   | 718                 |
| Exons    | 7366..7790                |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22569   | Seq. ID | OJ990915_16.9A18.C5 |
| Gene No.    | 46998   | Strand  | -                   |
| Start       | 3125  | End     | 8171                |
| Name        | OJ990915_16.9A18.C5.o2.np                         | Method  | AAT/NAP             |
| Start       | 7510  | End     | 8117                |
| GI          | 4572675   | Score   | 106                 |
| Exons       | 7510..7663, 7738..7762, 7826..8117                |         |                     |
| GI Descrip. | (AC006954) unknown protein [Arabidopsis thaliana] |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22570                              | Seq. ID | OJ990915_16.9A18.C6 |
| Gene No. | 46999                              | Strand  | -                   |
| Start    | 1382                               | End     | 2738                |
| Name     | OJ990915_16.9A18.C6.o1.gs          | Method  | GENSCAN             |
| Start    | 1382                               | End     | 2738                |
| GI       | none                               | Score   | .52                 |
| Exons    | 1382..1506, 2398..2536, 2592..2738 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22571   | Seq. ID | OJ990915_16.9A18.C8 |
| Gene No.    | 47000   | Strand  | +                   |
| Start       | 4104  | End     | 4306                |
| Name        | OJ990915_16.9A18.C8.o2.np   | Method  | AAT/NAP             |
| Start       | 4104  | End     | 4306                |
| GI          | 93144   | Score   | 73                  |
| Exons       | 4104..4306  |         |                     |
| GI Descrip. | hypothetical protein - suid herpesvirus 1 (strain Indiana-Funkhuser or Becker) gi 334068 (M57505) ORF2 [Pseudorabies virus] |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22571                              | Seq. ID | OJ990915_16.9A18.C8 |
| Gene No. | 47001                              | Strand  | +                   |
| Start    | 6582                               | End     | 7081                |
| Name     | OJ990915_16.9A18.C8.o2.gs          | Method  | GENSCAN             |
| Start    | 6582                               | End     | 7081                |
| GI       | none                               | Score   | .91                 |
| Exons    | 6582..6595, 6629..6834, 7011..7081 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22571   | Seq. ID | OJ990915_16.9A18.C8 |
| Gene No.    | 47002   | Strand  | +                   |
| Start       | 8014  | End     | 8782                |
| Name        | OJ990915_16.9A18.C8.o4.np                               | Method  | AAT/NAP             |
| Start       | 8014  | End     | 8782                |
| GI          | 4680183   | Score   | 193                 |
| Exons       | 8014..8084, 8693..8782                                  |         |                     |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22571 | Seq. ID | OJ990915_16.9A18.C8 |
| Gene No. | 47003 | Strand  | -                   |
| Start    | 165   | End     | 6768                |

Name OJ990915\_16.9A18.C8.o1.gp Method AAT/GAP  
 Start 165 End 2361  
 GI uC-osflcyp057d06b1 Score 493  
 Exons 165..274, 1252..1320, 2181..2286, 2329..2361  
 GI Descrip. '5051789/emb|CAB45082.1| 7.0e-18 (AL078637) putative protein  
 [Arabidopsis thaliana]'

Seq. No. 22571 Seq. ID OJ990915\_16.9A18.C8  
 Gene No. 47003 Strand -  
 Start 165 End 6768  
 Name OJ990915\_16.9A18.C8.o1.gs Method GENSCAN  
 Start 198 End 4484  
 GI none Score .94  
 Exons 198..274, 1252..1320, 2181..2286, 2669..2797, 3485..3597,  
 3906..4484

Seq. No. 22571 Seq. ID OJ990915\_16.9A18.C8  
 Gene No. 47003 Strand -  
 Start 165 End 6768  
 Name OJ990915\_16.9A18.C8.o1.np Method AAT/NAP  
 Start 2180 End 4913  
 GI 5051789 Score 257  
 Exons 2180..2290, 2691..2797, 3485..3600, 3691..3793, 3906..4112,  
 4810..4913  
 GI Descrip. (AL078637) putative protein [Arabidopsis thaliana]

Seq. No. 22571 Seq. ID OJ990915\_16.9A18.C8  
 Gene No. 47003 Strand -  
 Start 165 End 6768  
 Name OJ990915\_16.9A18.C8.o1.tm Method TBLASTX:Maize  
 Start 2181 End 3609  
 GI none Score 148  
 Exons 2181..2282, 2181..2285, 2182..2286, 2666..2752, 2668..2745,  
 2722..2799, 2740..2799, 3476..3598, 3481..3609, 3484..3609

Seq. No. 22571 Seq. ID OJ990915\_16.9A18.C8  
 Gene No. 47003 Strand -  
 Start 165 End 6768  
 Name OJ990915\_16.9A18.C8.o2.gp Method AAT/GAP  
 Start 2718 End 4088  
 GI 53585.1.R1084 Score 799  
 Exons 2718..2797, 3485..3597, 3707..3793, 3906..4088  
 GI Descrip. '5051789/emb|CAB45082.1| 3.0e-16 (AL078637) putative protein  
 [Arabidopsis thaliana]'

Seq. No. 22571 Seq. ID OJ990915\_16.9A18.C8  
 Gene No. 47003 Strand -  
 Start 165 End 6768  
 Name OJ990915\_16.9A18.C8.o3.np Method AAT/NAP  
 Start 2990 End 6768  
 GI 6016874 Score 235  
 Exons 2990..3039, 4384..4585, 6696..6768  
 GI Descrip. (AP000570) ESTs C19143(E10020), D25076(R3116) correspond to a  
 region of the predicted gene.; Similar to putative AC9  
 transposase. (P03010) [Oryza sativa]

Seq. No. 22572 Seq. ID OJ990915\_16.9A18.C9

Gene No. 47004  
 Start 182  
 Name OJ990915\_16.9A18.C9.o1.gs  
 Start 182  
 GI none  
 Exons 182..257, 350..592, 869..981

Strand -  
 End 981  
 Method GENSCAN  
 End 981  
 Score .66

Seq. No. 22573  
 Gene No. 47005  
 Start 716  
 Name OJ990915\_16.9A18.C10.o1.gs  
 Start 716  
 GI none  
 Exons 716..754, 826..1407, 1673..2347

Seq. ID OJ990915\_16.9A18.C10  
 Strand +  
 End 2347  
 Method GENSCAN  
 End 2347  
 Score .94

Seq. No. 22573  
 Gene No. 47005  
 Start 716  
 Name OJ990915\_16.9A18.C10.o2.np  
 Start 879  
 GI 6815094  
 Exons 879..947, 991..1074, 1661..1732, 1771..1972, 2003..2147  
 GI Descrip. (AP001081) hypothetical protein [Oryza sativa]

Seq. ID OJ990915\_16.9A18.C10  
 Strand +  
 End 2347  
 Method AAT/NAP  
 End 2147  
 Score 187

Seq. No. 22573  
 Gene No. 47006  
 Start 3247  
 Name OJ990915\_16.9A18.C10.o2.gs  
 Start 3247  
 GI none  
 Exons 3247..3669, 3987..4276, 5031..5181, 5320..5499

Seq. ID OJ990915\_16.9A18.C10  
 Strand -  
 End 6926  
 Method GENSCAN  
 End 5499  
 Score .9

Seq. No. 22573  
 Gene No. 47006  
 Start 3247  
 Name OJ990915\_16.9A18.C10.o3.np  
 Start 3247  
 GI 3522950  
 Exons 3247..3689, 3980..4378, 5031..5181, 5320..5359, 6815..6926  
 GI Descrip. (AC004411) hypothetical protein [Arabidopsis thaliana]

Seq. ID OJ990915\_16.9A18.C10  
 Strand -  
 End 6926  
 Method AAT/NAP  
 End 6926  
 Score 664

Seq. No. 22573  
 Gene No. 47006  
 Start 3247  
 Name OJ990915\_16.9A18.C10.o1.gp  
 Start 3406  
 GI LIB3432-029-P1-K1-D6  
 Exons 3406..3669, 3987..4112  
 GI Descrip. '3522950/gb|AAC34232.1| 6.0e-23 (AC004411) hypothetical protein [Arabidopsis thaliana]'

Seq. ID OJ990915\_16.9A18.C10  
 Strand -  
 End 6926  
 Method AAT/GAP  
 End 4112  
 Score 717

Seq. No. 22573  
 Gene No. 47006  
 Start 3247  
 Name OJ990915\_16.9A18.C10.o2.gp  
 Start 5015  
 GI uC-osflcyp154e03b1

Seq. ID OJ990915\_16.9A18.C10  
 Strand -  
 End 6926  
 Method AAT/GAP  
 End 5444  
 Score 537

Exons 5015..5181, 5320..5444  
 GI Descrip. '3510261 2.0e-09 (AC005310) hypothetical protein [Arabidopsis thaliana]'

Seq. No. 22573 Seq. ID OJ990915\_16.9A18.C10  
 Gene No. 47006 Strand -  
 Start 3247 End 6926  
 Name OJ990915\_16.9A18.C10.o3.gp Method AAT/GAP  
 Start 5015 End 5443  
 GI uC-osflcyp154e03b1 Score 535  
 Exons 5015..5181, 5320..5443  
 GI Descrip. '3510261 2.0e-09 (AC005310) hypothetical protein [Arabidopsis thaliana]'

Seq. No. 22573 Seq. ID OJ990915\_16.9A18.C10  
 Gene No. 47006 Strand -  
 Start 3247 End 6926  
 Name OJ990915\_16.9A18.C10.o4.gp Method AAT/GAP  
 Start 5605 End 6021  
 GI none Score 800  
 Exons 5605..6021

Seq. No. 22573 Seq. ID OJ990915\_16.9A18.C10  
 Gene No. 47007 Strand -  
 Start 6920 End 7694  
 Name OJ990915\_16.9A18.C10.o1.tw Method TBLASTX:Wheat  
 Start 1006 End 1397  
 GI none Score 140  
 Exons 1006..1161, 1062..1154, 1230..1397, 1231..1374, 1238..1378

Seq. No. 22573 Seq. ID OJ990915\_16.9A18.C10  
 Gene No. 47007 Strand -  
 Start 6920 End 7694  
 Name OJ990915\_16.9A18.C10.o3.tm Method TBLASTX:Maize  
 Start 1006 End 1332  
 GI none Score 107  
 Exons 1006..1089, 1093..1125, 1122..1163, 1123..1164, 1251..1331, 1252..1332, 1255..1332

Seq. No. 22573 Seq. ID OJ990915\_16.9A18.C10  
 Gene No. 47007 Strand -  
 Start 6920 End 7694  
 Name OJ990915\_16.9A18.C10.o2.tm Method TBLASTX:Maize  
 Start 1781 End 2037  
 GI none Score 230  
 Exons 1781..2035, 1789..2037

Seq. No. 22573 Seq. ID OJ990915\_16.9A18.C10  
 Gene No. 47007 Strand -  
 Start 6920 End 7694  
 Name OJ990915\_16.9A18.C10.o1.ts Method TBLASTX:Soybean  
 Start 3265 End 3595  
 GI 5509517 Score 85  
 Exons 3265..3339, 3358..3519, 3358..3594, 3464..3595  
 GI Descrip. 3522950 2.0e-36 (AC004411) hypothetical protein [Arabidopsis thaliana]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22573  | Seq. ID | OJ990915_16.9A18.C10 |
| Gene No. | 47007  | Strand  | -                    |
| Start    | 6920   | End     | 7694                 |
| Name     | OJ990915_16.9A18.C10.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 3451   | End     | 4292                 |
| GI       | none   | Score   | 288                  |
| Exons    | 3451..3672, 3452..3667, 3453..3671, 3454..3672, 3984..4292, 3987..4292 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22573  | Seq. ID | OJ990915_16.9A18.C10 |
| Gene No. | 47007  | Strand  | -                    |
| Start    | 6920   | End     | 7694                 |
| Name     | OJ990915_16.9A18.C10.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4215   | End     | 5385                 |
| GI       | none   | Score   | 76                   |
| Exons    | 4215..4382, 4216..4299, 5027..5221, 5029..5106, 5131..5154, 5149..5214, 5317..5385 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22573                              | Seq. ID | OJ990915_16.9A18.C10 |
| Gene No. | 47007                              | Strand  | -                    |
| Start    | 6920                               | End     | 7694                 |
| Name     | OJ990915_16.9A18.C10.o3.gs         | Method  | GENSCAN              |
| Start    | 6920                               | End     | 7694                 |
| GI       | none                               | Score   | .43                  |
| Exons    | 6920..7000, 7243..7365, 7683..7694 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22574                                     | Seq. ID | OJ990915_16.9A18.C11 |
| Gene No.    | 47008                                     | Strand  | +                    |
| Start       | 1444                                      | End     | 3124                 |
| Name        | OJ990915_16.9A18.C11.o1.np                | Method  | AAT/NAP              |
| Start       | 1444                                      | End     | 3124                 |
| GI          | 4234846                                   | Score   | 1340                 |
| Exons       | 1444..1604, 1647..3124                    |         |                      |
| GI Descrip. | (AF082130) gag-pol polyprotein [Zea mays] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22574  | Seq. ID | OJ990915_16.9A18.C11 |
| Gene No. | 47008  | Strand  | +                    |
| Start    | 1444   | End     | 3124                 |
| Name     | OJ990915_16.9A18.C11.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1536   | End     | 2547                 |
| GI       | none   | Score   | 586                  |
| Exons    | 1536..2114, 1537..2145, 2155..2286, 2226..2267, 2391..2441, 2482..2547 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22574                              | Seq. ID | OJ990915_16.9A18.C11 |
| Gene No. | 47008                              | Strand  | +                    |
| Start    | 1444                               | End     | 3124                 |
| Name     | OJ990915_16.9A18.C11.o2.tw         | Method  | TBLASTX:Wheat        |
| Start    | 2467                               | End     | 2904                 |
| GI       | none                               | Score   | 110                  |
| Exons    | 2467..2664, 2734..2904, 2766..2888 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22574                      | Seq. ID | OJ990915_16.9A18.C11 |
| Gene No. | 47008                      | Strand  | +                    |
| Start    | 1444                       | End     | 3124                 |
| Name     | OJ990915_16.9A18.C11.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 2761                       | End     | 3123                 |



GI none  
Exons 2761..3123, 2772..2978

Score 321

Seq. No. 22574  
Gene No. 47008  
Start 1444  
Name OJ990915\_16.9A18.C11.o1.tw  
Start 2920  
GI none  
Exons 2920..3120, 2944..3120

Seq. ID OJ990915\_16.9A18.C11  
Strand +  
End 3124  
Method TBLASTX:Wheat  
End 3120  
Score 213

Seq. No. 22575  
Gene No. 47009  
Start 1  
Name OJ990915\_16.9A18.C12.o1.np  
Start 1  
GI 4234852  
Exons 1..1903  
GI Descrip. (AF082133) gag-pol polyprotein [Zea mays]

Seq. ID OJ990915\_16.9A18.C12  
Strand +  
End 1906  
Method AAT/NAP  
End 1903  
Score 2194

Seq. No. 22575  
Gene No. 47009  
Start 1  
Name OJ990915\_16.9A18.C12.o1.gs  
Start 107  
GI none  
Exons 107..1906

Seq. ID OJ990915\_16.9A18.C12  
Strand +  
End 1906  
Method GENSCAN  
End 1906  
Score .6

Seq. No. 22575  
Gene No. 47009  
Start 1  
Name OJ990915\_16.9A18.C12.o1.ts  
Start 389  
GI 5509260  
Exons 389..826, 478..750, 793..825  
GI Descrip. -

Seq. ID OJ990915\_16.9A18.C12  
Strand +  
End 1906  
Method TBLASTX:Soybean  
End 826  
Score 365

Seq. No. 22575  
Gene No. 47009  
Start 1  
Name OJ990915\_16.9A18.C12.o1.tc  
Start 476  
GI none  
Exons 476..736, 478..714

Seq. ID OJ990915\_16.9A18.C12  
Strand +  
End 1906  
Method TBLASTX:Cress  
End 736  
Score 249

Seq. No. 22575  
Gene No. 47009  
Start 1  
Name OJ990915\_16.9A18.C12.o1.tw  
Start 517  
GI none  
Exons 517..864, 518..862, 518..871, 847..1293, 848..1297

Seq. ID OJ990915\_16.9A18.C12  
Strand +  
End 1906  
Method TBLASTX:Wheat  
End 1297  
Score 364

Seq. No. 22575  
Gene No. 47009  
Start 1  
Name OJ990915\_16.9A18.C12.o2.tm

Seq. ID OJ990915\_16.9A18.C12  
Strand +  
End 1906  
Method TBLASTX:Maize

Start 518  
 GI none  
 Exons 518..826, 535..825, 860..961

End 961  
 Score 275

Seq. No. 22575  
 Gene No. 47009  
 Start 1  
 Name OJ990915\_16.9A18.C12.o1.tm  
 Start 962  
 GI none  
 Exons 962..1123, 1097..1393, 1237..1392

Seq. ID OJ990915\_16.9A18.C12  
 Strand +  
 End 1906  
 Method TBLASTX:Maize  
 End 1393  
 Score 81

Seq. No. 22575  
 Gene No. 47009  
 Start 1  
 Name OJ990915\_16.9A18.C12.o2.ts  
 Start 1283  
 GI none  
 Exons 1283..1465, 1474..1575, 1478..1669, 1658..1849

Seq. ID OJ990915\_16.9A18.C12  
 Strand +  
 End 1906  
 Method TBLASTX:Soybean  
 End 1849  
 Score 131

Seq. No. 22575  
 Gene No. 47009  
 Start 1  
 Name OJ990915\_16.9A18.C12.o3.tm  
 Start 1406  
 GI none  
 Exons 1406..1465, 1438..1458, 1447..1614, 1448..1624, 1673..1864

Seq. ID OJ990915\_16.9A18.C12  
 Strand +  
 End 1906  
 Method TBLASTX:Maize  
 End 1864  
 Score 55

Seq. No. 22575  
 Gene No. 47009  
 Start 1  
 Name OJ990915\_16.9A18.C12.o2.tw  
 Start 1449  
 GI none  
 Exons 1449..1562, 1453..1686, 1457..1852

Seq. ID OJ990915\_16.9A18.C12  
 Strand +  
 End 1906  
 Method TBLASTX:Wheat  
 End 1852  
 Score 51

Seq. No. 22576  
 Gene No. 47010  
 Start 112  
 Name OJ990915\_16.9A18.C13.o1.gs  
 Start 112  
 GI none  
 Exons 112..290

Seq. ID OJ990915\_16.9A18.C13  
 Strand +  
 End 290  
 Method GENSCAN  
 End 290  
 Score .91

Seq. No. 22576  
 Gene No. 47011  
 Start 1007  
 Name OJ990915\_16.9A18.C13.o2.gs  
 Start 1007  
 GI none  
 Exons 1007..1065, 2660..2926, 3102..3287, 3330..3462, 3576..3695, 4517..4945, 6175..6861

Seq. ID OJ990915\_16.9A18.C13  
 Strand +  
 End 7184  
 Method GENSCAN  
 End 6861  
 Score .84

Seq. No. 22576  
 Gene No. 47011  
 Start 1007  
 Name OJ990915\_16.9A18.C13.o1.gp

Seq. ID OJ990915\_16.9A18.C13  
 Strand +  
 End 7184  
 Method AAT/GAP

Start 3023 End 7184  
 GI 969 1.R1084 Score 3270  
 Exons 3023..3287, 4517..4945, 6175..7184  
 GI Descrip. '2499614/sp|Q40517|NTF3 TOBAC 1.0e-179 MITOGEN-ACTIVATED PROTEIN KINASE HOMOLOG NTF3 (P43) >gi\_481830\_pir\_S39559 mitogen-activated protein kinase 3 homolog ntf3 - common tobacco >gi\_406751\_emb\_CAA49592\_ (X69971) NTF3 [Nicotiana tabacum]'

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
 Gene No. 47011 Strand +  
 Start 1007 End 7184  
 Name OJ990915\_16.9A18.C13.o1.np Method AAT/NAP  
 Start 4523 End 6858  
 GI 6491800 Score 1920  
 Exons 4523..4945, 6175..6858  
 GI Descrip. (AJ251330) MAPK4 protein [Oryza sativa]

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
 Gene No. 47012 Strand +  
 Start 12468 End 12967  
 Name OJ990915\_16.9A18.C13.o3.gp Method AAT/GAP  
 Start 12468 End 12967  
 GI none Score 873  
 Exons 12468..12967

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
 Gene No. 47013 Strand -  
 Start 7656 End 8398  
 Name OJ990915\_16.9A18.C13.o2.np Method AAT/NAP  
 Start 7656 End 8328  
 GI 5869758 Score 276  
 Exons 7656..7688, 7901..8101, 8218..8328  
 GI Descrip. (X58827) AT-LS1 product [Arabidopsis thaliana]

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
 Gene No. 47013 Strand -  
 Start 7656 End 8398  
 Name OJ990915\_16.9A18.C13.o2.gp Method AAT/GAP  
 Start 7983 End 8398  
 GI 1632694 Score 482  
 Exons 7983..8101, 8218..8398

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
 Gene No. 47014 Strand -  
 Start 12566 End 13189  
 Name OJ990915\_16.9A18.C13.o1.tc Method TBLASTX:Cress  
 Start 4462 End 6840  
 GI none Score 241  
 Exons 4462..4890, 4520..4948, 4522..4821, 4524..4910, 4547..4945, 6162..6347, 6162..6773, 6167..6400, 6190..6837, 6214..6840

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
 Gene No. 47014 Strand -  
 Start 12566 End 13189  
 Name OJ990915\_16.9A18.C13.o1.tm Method TBLASTX:Maize  
 Start 4485 End 6862  
 GI none Score 638

Exons 4485..4943, 4511..4948, 4522..4947, 6173..6394, 6174..6785,  
6190..6861, 6199..6861, 6455..6862

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
Gene No. 47014 Strand -  
Start 12566 End 13189  
Name OJ990915\_16.9A18.C13.o2.ts Method TBLASTX:Soybean  
Start 4517 End 4980  
GI none Score 570  
Exons 4517..4948, 4522..4821, 4562..4948, 4873..4980

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
Gene No. 47014 Strand -  
Start 12566 End 13189  
Name OJ990915\_16.9A18.C13.o1.tw Method TBLASTX:Wheat  
Start 4597 End 6303  
GI none Score 338  
Exons 4597..4938, 4622..4948, 4625..4945, 6180..6296, 6190..6303,  
6199..6300

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
Gene No. 47014 Strand -  
Start 12566 End 13189  
Name OJ990915\_16.9A18.C13.o1.ts Method TBLASTX:Soybean  
Start 6165 End 6846  
GI none Score 88  
Exons 6165..6332, 6174..6488, 6182..6391, 6190..6492, 6492..6785,  
6493..6846, 6496..6795

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
Gene No. 47014 Strand -  
Start 12566 End 13189  
Name OJ990915\_16.9A18.C13.o2.tw Method TBLASTX:Wheat  
Start 6307 End 6537  
GI none Score 261  
Exons 6307..6477, 6316..6537, 6318..6527

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
Gene No. 47014 Strand -  
Start 12566 End 13189  
Name OJ990915\_16.9A18.C13.o2.tc Method TBLASTX:Cress  
Start 7889 End 8328  
GI none Score 79  
Exons 7889..8101, 8176..8328

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
Gene No. 47014 Strand -  
Start 12566 End 13189  
Name OJ990915\_16.9A18.C13.o2.tm Method TBLASTX:Maize  
Start 7889 End 8334  
GI none Score 83  
Exons 7889..8101, 8176..8334

Seq. No. 22576 Seq. ID OJ990915\_16.9A18.C13  
Gene No. 47014 Strand -  
Start 12566 End 13189  
Name OJ990915\_16.9A18.C13.o3.tw Method TBLASTX:Wheat

|       |                                    |       |      |
|-------|------------------------------------|-------|------|
| Start | 7889                               | End   | 8262 |
| GI    | none                               | Score | 86   |
| Exons | 7889..8101, 7973..8104, 8176..8262 |       |      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22576  | Seq. ID | OJ990915_16.9A18.C13 |
| Gene No. | 47014  | Strand  | -                    |
| Start    | 12566  | End     | 13189                |
| Name     | OJ990915_16.9A18.C13.o3.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 7889   | End     | 8329                 |
| GI       | none   | Score   | 51                   |
| Exons    | 7889..8101, 7953..7997, 7982..8101, 8173..8328, 8177..8329 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22576                      | Seq. ID | OJ990915_16.9A18.C13 |
| Gene No. | 47014                      | Strand  | -                    |
| Start    | 12566                      | End     | 13189                |
| Name     | OJ990915_16.9A18.C13.o4.gs | Method  | GENSCAN              |
| Start    | 12566                      | End     | 13189                |
| GI       | none                       | Score   | .83                  |
| Exons    | 12566..13006, 13178..13189 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22577   | Seq. ID | OJ990915_16.9A18.C14 |
| Gene No. | 47015   | Strand  | +                    |
| Start    | 52  | End     | 4184                 |
| Name     | OJ990915_16.9A18.C14.o1.gs                              | Method  | GENSCAN              |
| Start    | 52  | End     | 4184                 |
| GI       | none  | Score   | .86                  |
| Exons    | 52..754, 1772..1936, 2085..2137, 3868..3905, 4033..4184 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22577  | Seq. ID | OJ990915_16.9A18.C14 |
| Gene No. | 47016  | Strand  | +                    |
| Start    | 4299   | End     | 8513                 |
| Name     | OJ990915_16.9A18.C14.o1.tw                       | Method  | TBLASTX:Wheat        |
| Start    | 194  | End     | 486                  |
| GI       | none   | Score   | 69                   |
| Exons    | 194..256, 194..232, 236..424, 247..420, 286..486 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22577  | Seq. ID | OJ990915_16.9A18.C14 |
| Gene No. | 47016  | Strand  | +                    |
| Start    | 4299   | End     | 8513                 |
| Name     | OJ990915_16.9A18.C14.o2.gs   | Method  | GENSCAN              |
| Start    | 4299   | End     | 8484                 |
| GI       | none   | Score   | .79                  |
| Exons    | 4299..4515, 4612..4743, 4837..4904, 5024..5088, 5276..5342, 5438..5725, 5803..5943, 6044..6295, 6726..6805, 6900..6993, 7536..7618, 8127..8484 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22577  | Seq. ID | OJ990915_16.9A18.C14 |
| Gene No.    | 47016  | Strand  | +                    |
| Start       | 4299   | End     | 8513                 |
| Name        | OJ990915_16.9A18.C14.o1.np   | Method  | AAT/NAP              |
| Start       | 4440   | End     | 8513                 |
| GI          | 3927835  | Score   | 1006                 |
| Exons       | 4440..4515, 4612..4743, 4837..4904, 5024..5088, 5276..5342, 5438..5725, 5803..5979, 6044..6295, 6726..6805, 6891..6993, 7536..7618, 8127..8278, 8312..8513 |         |                      |
| GI Descrip. | (AC005727) putative para-aminobenzoate synthase and glutamine amidotransferase, a bifunctional enzyme [Arabidopsis thaliana]                               |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22577  | Seq. ID | OJ990915_16.9A18.C14 |
| Gene No. | 47016  | Strand  | +                    |
| Start    | 4299   | End     | 8513                 |
| Name     | OJ990915_16.9A18.C14.ol.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4452   | End     | 5077                 |
| GI       | none   | Score   | 103                  |
| Exons    | 4452..4523, 4475..4564, 4629..4778, 4634..4753, 4835..4909, 4836..4904, 5021..5077 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22578                      | Seq. ID | OJ990915_16.9A18.C15 |
| Gene No. | 47017                      | Strand  | +                    |
| Start    | 115                        | End     | 646                  |
| Name     | OJ990915_16.9A18.C15.ol.gs | Method  | GENSCAN              |
| Start    | 115                        | End     | 646                  |
| GI       | none                       | Score   | .55                  |
| Exons    | 115..646                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22578  | Seq. ID | OJ990915_16.9A18.C15 |
| Gene No.    | 47017  | Strand  | +                    |
| Start       | 115  | End     | 646                  |
| Name        | OJ990915_16.9A18.C15.ol.np   | Method  | AAT/NAP              |
| Start       | 115  | End     | 607                  |
| GI          | 3927835  | Score   | 630                  |
| Exons       | 115..607   |         |                      |
| GI Descrip. | (AC005727) putative para-aminobenzoate synthase and glutamine amidotransferase, a bifunctional enzyme [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22578                      | Seq. ID | OJ990915_16.9A18.C15 |
| Gene No. | 47018                      | Strand  | +                    |
| Start    | 1269                       | End     | 1505                 |
| Name     | OJ990915_16.9A18.C15.ol.tm | Method  | TBLASTX:Maize        |
| Start    | 109                        | End     | 466                  |
| GI       | none                       | Score   | 266                  |
| Exons    | 109..411, 110..466         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22578                      | Seq. ID | OJ990915_16.9A18.C15 |
| Gene No. | 47018                      | Strand  | +                    |
| Start    | 1269                       | End     | 1505                 |
| Name     | OJ990915_16.9A18.C15.o2.gs | Method  | GENSCAN              |
| Start    | 1269                       | End     | 1505                 |
| GI       | none                       | Score   | .74                  |
| Exons    | 1269..1288, 1420..1505     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22579  | Seq. ID | OJ990915_16.9A18.C16 |
| Gene No.    | 47019  | Strand  | +                    |
| Start       | 1  | End     | 3998                 |
| Name        | OJ990915_16.9A18.C16.ol.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 3998                 |
| GI          | 6598511  | Score   | 741                  |
| Exons       | 1..128, 212..356, 496..620, 763..855, 948..998, 1103..1168, 1265..1330, 1431..1511, 1596..1673, 1736..1905, 2012..2118, 2228..2327, 2445..2652, 3979..3998 |         |                      |
| GI Descrip. | (AC006069) unknown protein [Arabidopsis thaliana]  |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22579 | Seq. ID | OJ990915_16.9A18.C16 |
| Gene No. | 47019 | Strand  | +                    |

|       |  |        |         |
|-------|--|--------|---------|
| Start | 1  | End    | 3998    |
| Name  | OJ990915_16.9A18.C16.o1.gs   | Method | GENSCAN |
| Start | 206  | End    | 2756    |
| GI    | none   | Score  | .72     |
| Exons | 206..356, 496..620, 826..855, 1265..1330, 1596..1676, 1723..1929, 2018..2093, 2200..2327, 2445..2756 |        |         |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22579   | Seq. ID | OJ990915_16.9A18.C16 |
| Gene No. | 47020   | Strand  | -                    |
| Start    | 3264  | End     | 4055                 |
| Name     | OJ990915_16.9A18.C16.o2.ts  | Method  | TBLASTX:Soybean      |
| Start    | 797   | End     | 1661                 |
| GI       | none  | Score   | 42                   |
| Exons    | 797..838, 945..989, 947..1018, 1101..1166, 1102..1179, 1103..1165, 1255..1323, 1265..1324, 1428..1511, 1430..1510, 1593..1661 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22579  | Seq. ID | OJ990915_16.9A18.C16 |
| Gene No. | 47020  | Strand  | -                    |
| Start    | 3264   | End     | 4055                 |
| Name     | OJ990915_16.9A18.C16.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 1051   | End     | 2303                 |
| GI       | none   | Score   | 62                   |
| Exons    | 1051..1179, 1092..1151, 1093..1152, 1094..1165, 1265..1324, 1428..1532, 1439..1510, 1593..1661, 1595..1645, 2259..2303 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22579  | Seq. ID | OJ990915_16.9A18.C16 |
| Gene No. | 47020  | Strand  | -                    |
| Start    | 3264   | End     | 4055                 |
| Name     | OJ990915_16.9A18.C16.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 1104   | End     | 1661                 |
| GI       | none   | Score   | 87                   |
| Exons    | 1104..1157, 1111..1179, 1112..1165, 1265..1345, 1428..1511, 1430..1510, 1593..1661, 1595..1645 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22579   | Seq. ID | OJ990915_16.9A18.C16 |
| Gene No.    | 47020   | Strand  | -                    |
| Start       | 3264  | End     | 4055                 |
| Name        | OJ990915_16.9A18.C16.o1.gp  | Method  | AAT/GAP              |
| Start       | 3264  | End     | 4055                 |
| GI          | 21459_1.R1084   | Score   | 1147                 |
| Exons       | 3264..3604, 3690..3868, 3952..4055  |         |                      |
| GI Descrip. | '4512653/gb AAD21708.1  1.0e-100 (AC007048) unknown protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22579  | Seq. ID | OJ990915_16.9A18.C16 |
| Gene No. | 47020  | Strand  | -                    |
| Start    | 3264   | End     | 4055                 |
| Name     | OJ990915_16.9A18.C16.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 3532   | End     | 4054                 |
| GI       | none   | Score   | 147                  |
| Exons    | 3532..3606, 3668..3871, 3684..3881, 3689..3772, 3824..3871, 3944..4054, 3952..4053 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22579 | Seq. ID | OJ990915_16.9A18.C16 |
| Gene No. | 47020 | Strand  | -                    |
| Start    | 3264  | End     | 4055                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990915_16.9A18.C16.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 3532   | End     | 4055                 |
| GI          | none   | Score   | 44                   |
| Exons       | 3532..3606, 3535..3603, 3551..3613, 3668..3871, 3684..3881, 3689..3772, 3824..3871, 3932..4054, 3952..4053, 3975..4055 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22579  | Seq. ID | OJ990915_16.9A18.C16 |
| Gene No.    | 47020  | Strand  | -                    |
| Start       | 3264   | End     | 4055                 |
| Name        | OJ990915_16.9A18.C16.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 3532   | End     | 4054                 |
| GI          | none   | Score   | 57                   |
| Exons       | 3532..3606, 3551..3613, 3683..3871, 3689..3772, 3824..3871, 3932..4054, 3952..4053                                     |         |                      |
|             |  |         |                      |
| Seq. No.    | 22579  | Seq. ID | OJ990915_16.9A18.C16 |
| Gene No.    | 47020  | Strand  | -                    |
| Start       | 3264   | End     | 4055                 |
| Name        | OJ990915_16.9A18.C16.o2.np   | Method  | AAT/NAP              |
| Start       | 3535   | End     | 4055                 |
| GI          | 4512653  | Score   | 455                  |
| Exons       | 3535..3604, 3690..3868, 3952..4055   |         |                      |
| GI Descrip. | (AC007048) 26S proteasome regulatory subunit S2 [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22580  | Seq. ID | OJ990915_16.9A18.C17 |
| Gene No.    | 47021  | Strand  | -                    |
| Start       | 1  | End     | 692                  |
| Name        | OJ990915_16.9A18.C17.o1.gp   | Method  | AAT/GAP              |
| Start       | 1  | End     | 640                  |
| GI          | 21459_1.R1084  | Score   | 486                  |
| Exons       | 1..105, 186..245, 543..640   |         |                      |
| GI Descrip. | '4512653/gb AAD21708.1  1.0e-100 (AC007048) unknown protein [Arabidopsis thaliana]'                                    |         |                      |
|             |  |         |                      |
| Seq. No.    | 22580  | Seq. ID | OJ990915_16.9A18.C17 |
| Gene No.    | 47021  | Strand  | -                    |
| Start       | 1  | End     | 692                  |
| Name        | OJ990915_16.9A18.C17.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 692                  |
| GI          | 4512653  | Score   | 380                  |
| Exons       | 1..105, 186..239, 537..692   |         |                      |
| GI Descrip. | (AC007048) 26S proteasome regulatory subunit S2 [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22580  | Seq. ID | OJ990915_16.9A18.C17 |
| Gene No.    | 47021  | Strand  | -                    |
| Start       | 1  | End     | 692                  |
| Name        | OJ990915_16.9A18.C17.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 10   | End     | 692                  |
| GI          | none   | Score   | 109                  |
| Exons       | 10..105, 117..103, 186..248, 186..245, 531..692, 535..690  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22580  | Seq. ID | OJ990915_16.9A18.C17 |
| Gene No.    | 47021  | Strand  | -                    |
| Start       | 1  | End     | 692                  |
| Name        | OJ990915_16.9A18.C17.o1.ts   | Method  | TBLASTX:Soybean      |



|       |  |       |     |
|-------|--|-------|-----|
| Start | 10   | End   | 692 |
| GI    | none   | Score | 119 |
| Exons | 10..105, 11..106, 180..245, 187..246, 531..692, 535..687 |       |     |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22580  | Seq. ID | OJ990915_16.9A18.C17 |
| Gene No. | 47021  | Strand  | -                    |
| Start    | 1  | End     | 692                  |
| Name     | OJ990915_16.9A18.C17.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 178  | End     | 692                  |
| GI       | none   | Score   | 67                   |
| Exons    | 178..246, 180..245, 199..246, 200..247, 524..673, 531..692, 534..674, 535..690 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22580                      | Seq. ID | OJ990915_16.9A18.C17 |
| Gene No. | 47021                      | Strand  | -                    |
| Start    | 1                          | End     | 692                  |
| Name     | OJ990915_16.9A18.C17.o1.gs | Method  | GENSCAN              |
| Start    | 186                        | End     | 668                  |
| GI       | none                       | Score   | .69                  |
| Exons    | 186..245, 543..668         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22581  | Seq. ID | OJ990915_16.9A18.C18 |
| Gene No.    | 47022  | Strand  | -                    |
| Start       | 1  | End     | 759                  |
| Name        | OJ990915_16.9A18.C18.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 759                  |
| GI          | 4512653  | Score   | 116                  |
| Exons       | 1..197, 734..759   |         |                      |
| GI Descrip. | (AC007048) 26S proteasome regulatory subunit S2 [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22581                      | Seq. ID | OJ990915_16.9A18.C18 |
| Gene No. | 47022                      | Strand  | -                    |
| Start    | 1                          | End     | 759                  |
| Name     | OJ990915_16.9A18.C18.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 81                         | End     | 232                  |
| GI       | none                       | Score   | 161                  |
| Exons    | 81..200, 81..200, 83..232  |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22581                      | Seq. ID | OJ990915_16.9A18.C18 |
| Gene No. | 47022                      | Strand  | -                    |
| Start    | 1                          | End     | 759                  |
| Name     | OJ990915_16.9A18.C18.o1.gs | Method  | GENSCAN              |
| Start    | 84                         | End     | 197                  |
| GI       | none                       | Score   | .79                  |
| Exons    | 84..197                    |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22582  | Seq. ID | OJ990915_16.9A18.C19 |
| Gene No.    | 47023  | Strand  | -                    |
| Start       | 1  | End     | 2718                 |
| Name        | OJ990915_16.9A18.C19.o1.gp   | Method  | AAT/GAP              |
| Start       | 1  | End     | 337                  |
| GI          | LIB3474-008-P1-K1-E3   | Score   | 454                  |
| Exons       | 1..162, 255..337   |         |                      |
| GI Descrip. | '4512653/gb AAD21708.1  2.0e-39 (AC007048) unknown protein [Arabidopsis thaliana]' |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22582   | Seq. ID | OJ990915_16.9A18.C19 |
| Gene No. | 47023   | Strand  | -                    |
| Start    | 1   | End     | 2718                 |
| Name     | OJ990915_16.9A18.C19.o1.tc                            | Method  | TBLASTX:Cress        |
| Start    | 1   | End     | 544                  |
| GI       | none  | Score   | 107                  |
| Exons    | 1..180, 2..133, 13..201, 259..318, 431..544, 445..543 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22582   | Seq. ID | OJ990915_16.9A18.C19 |
| Gene No. | 47023   | Strand  | -                    |
| Start    | 1   | End     | 2718                 |
| Name     | OJ990915_16.9A18.C19.o1.tm                          | Method  | TBLASTX:Maize        |
| Start    | 1   | End     | 357                  |
| GI       | none  | Score   | 108                  |
| Exons    | 1..96, 2..109, 91..180, 98..181, 249..356, 259..357 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22582  | Seq. ID | OJ990915_16.9A18.C19 |
| Gene No. | 47023  | Strand  | -                    |
| Start    | 1  | End     | 2718                 |
| Name     | OJ990915_16.9A18.C19.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1  | End     | 2442                 |
| GI       | none   | Score   | 129                  |
| Exons    | 1..180, 2..181, 262..309, 445..585, 446..586, 446..589, 477..590, 517..612, 676..783, 677..784, 678..782, 800..955, 842..949, 847..960, 847..963, 1054..1146, 1056..1163, 1369..1440, 1537..1647, 1544..1642, 1738..1824, 1739..1825, 1917..1979, 1931..1990, 2358..2438, 2359..2442 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22582  | Seq. ID | OJ990915_16.9A18.C19 |
| Gene No.    | 47023  | Strand  | -                    |
| Start       | 1  | End     | 2718                 |
| Name        | OJ990915_16.9A18.C19.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 2718                 |
| GI          | 4512653  | Score   | 1033                 |
| Exons       | 1..162, 249..359, 445..585, 677..781, 847..954, 1062..1220, 1369..1449, 1531..1639, 1742..1824, 1940..1978, 2370..2439, 2684..2718 |         |                      |
| GI Descrip. | (AC007048) 26S proteasome regulatory subunit S2 [Arabidopsis thaliana]   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22582  | Seq. ID | OJ990915_16.9A18.C19 |
| Gene No. | 47023  | Strand  | -                    |
| Start    | 1  | End     | 2718                 |
| Name     | OJ990915_16.9A18.C19.o1.gs   | Method  | GENSCAN              |
| Start    | 255  | End     | 2435                 |
| GI       | none   | Score   | .94                  |
| Exons    | 255..359, 445..585, 677..781, 847..954, 1062..1220, 1369..1449, 1528..1639, 1742..1824, 1940..1978, 2370..2435 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22583  | Seq. ID | OJ990915_16.9A18.C20 |
| Gene No. | 47024  | Strand  | +                    |
| Start    | 4558   | End     | 7294                 |
| Name     | OJ990915_16.9A18.C20.o2.gs                     | Method  | GENSCAN              |
| Start    | 4558   | End     | 7177                 |
| GI       | none   | Score   | .49                  |
| Exons    | 4558..4748, 6021..6230, 6735..6843, 6928..7177 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22583   | Seq. ID | OJ990915_16.9A18.C20 |
| Gene No.    | 47024   | Strand  | +                    |
| Start       | 4558  | End     | 7294                 |
| Name        | OJ990915_16.9A18.C20.o2.np                                | Method  | AAT/NAP              |
| Start       | 6064  | End     | 7294                 |
| GI          | 4938478   | Score   | 762                  |
| Exons       | 6064..6230, 6699..6843, 6928..7294                        |         |                      |
| GI Descrip. | (AL078464) proteinase-like protein [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22583  | Seq. ID | OJ990915_16.9A18.C20 |
| Gene No.    | 47025  | Strand  | -                    |
| Start       | 1  | End     | 2109                 |
| Name        | OJ990915_16.9A18.C20.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 1963                 |
| GI          | 4512653  | Score   | 415                  |
| Exons       | 1..112, 438..505, 733..792, 878..998, 1636..1736, 1823..1963           |         |                      |
| GI Descrip. | (AC007048) 26S proteasome regulatory subunit S2 [Arabidopsis thaliana] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22583   | Seq. ID | OJ990915_16.9A18.C20 |
| Gene No. | 47025   | Strand  | -                    |
| Start    | 1   | End     | 2109                 |
| Name     | OJ990915_16.9A18.C20.o1.gs                                    | Method  | GENSCAN              |
| Start    | 70  | End     | 1963                 |
| GI       | none  | Score   | .89                  |
| Exons    | 70..112, 438..505, 733..792, 878..998, 1636..1736, 1823..1963 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22583   | Seq. ID | OJ990915_16.9A18.C20 |
| Gene No. | 47025   | Strand  | -                    |
| Start    | 1   | End     | 2109                 |
| Name     | OJ990915_16.9A18.C20.o2.ts  | Method  | TBLASTX:Soybean      |
| Start    | 70  | End     | 1736                 |
| GI       | none  | Score   | 71                   |
| Exons    | 70..114, 437..508, 718..798, 719..793, 878..1000, 879..1004, 1635..1736 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22583  | Seq. ID | OJ990915_16.9A18.C20 |
| Gene No.    | 47025  | Strand  | -                    |
| Start       | 1  | End     | 2109                 |
| Name        | OJ990915_16.9A18.C20.o1.gp   | Method  | AAT/GAP              |
| Start       | 878  | End     | 2109                 |
| GI          | uC-osroM202001e08b1  | Score   | 952                  |
| Exons       | 878..998, 1636..1736, 1823..2109   |         |                      |
| GI Descrip. | '4512653/gb AAD21708.1  1.0e-24 (AC007048) unknown protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22583  | Seq. ID | OJ990915_16.9A18.C20 |
| Gene No. | 47026  | Strand  |                      |
| Start    | 6018   | End     | 6250                 |
| Name     | OJ990915_16.9A18.C20.o2.tm                     | Method  | TBLASTX:Maize        |
| Start    | 6018   | End     | 6250                 |
| GI       | none   | Score   | 46                   |
| Exons    | 6018..6230, 6052..6096, 6079..6228, 6098..6250 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22583 | Seq. ID | OJ990915_16.9A18.C20 |
| Gene No. | 47027 | Strand  |                      |
| Start    | 6926  | End     | 7292                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990915_16.9A18.C20.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 6926   | End     | 7092                 |
| GI          | none   | Score   | 166                  |
| Exons       | 6926..7081, 6927..7082, 6927..7091, 6928..7092   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22583  | Seq. ID | OJ990915_16.9A18.C20 |
| Gene No.    | 47027  | Strand  |                      |
| Start       | 6926   | End     | 7292                 |
| Name        | OJ990915_16.9A18.C20.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 6930   | End     | 7292                 |
| GI          | none   | Score   | 485                  |
| Exons       | 6930..7292, 6931..7290   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22584  | Seq. ID | OJ990915_16.9A18.C21 |
| Gene No.    | 47028  | Strand  | +                    |
| Start       | 167  | End     | 1396                 |
| Name        | OJ990915_16.9A18.C21.o1.gs   | Method  | GENSCAN              |
| Start       | 167  | End     | 1045                 |
| GI          | none   | Score   | .76                  |
| Exons       | 167..239, 376..772, 972..1045  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22584  | Seq. ID | OJ990915_16.9A18.C21 |
| Gene No.    | 47028  | Strand  | +                    |
| Start       | 167  | End     | 1396                 |
| Name        | OJ990915_16.9A18.C21.o1.np   | Method  | AAT/NAP              |
| Start       | 167  | End     | 1396                 |
| GI          | 3176726  | Score   | 442                  |
| Exons       | 167..239, 487..811, 1362..1396   |         |                      |
| GI Descrip. | (AC002392) putative serine protease [Arabidopsis thaliana]                               |         |                      |
|             |  |         |                      |
| Seq. No.    | 22584  | Seq. ID | OJ990915_16.9A18.C21 |
| Gene No.    | 47028  | Strand  | +                    |
| Start       | 167  | End     | 1396                 |
| Name        | OJ990915_16.9A18.C21.o1.gp   | Method  | AAT/GAP              |
| Start       | 600  | End     | 999                  |
| GI          | LIB3475-001-P1-K2-A5   | Score   | 331                  |
| Exons       | 600..776, 929..999   |         |                      |
| GI Descrip. | '4176420/dbj BAA37167  2.0e-11 (AB008097) cytochrome P450 [Arabidopsis thaliana]'        |         |                      |
|             |  |         |                      |
| Seq. No.    | 22584  | Seq. ID | OJ990915_16.9A18.C21 |
| Gene No.    | 47029  | Strand  | -                    |
| Start       | 1097   | End     | 1396                 |
| Name        | OJ990915_16.9A18.C21.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 165  | End     | 793                  |
| GI          | none   | Score   | 119                  |
| Exons       | 165..239, 165..239, 166..240, 169..240, 451..771, 475..768, 485..769, 486..770, 602..793 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22584  | Seq. ID | OJ990915_16.9A18.C21 |
| Gene No.    | 47029  | Strand  | -                    |
| Start       | 1097   | End     | 1396                 |
| Name        | OJ990915_16.9A18.C21.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 165  | End     | 721                  |
| GI          | none   | Score   | 110                  |
| Exons       | 165..239, 451..720, 486..719, 602..721   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22584  | Seq. ID | OJ990915_16.9A18.C21 |
| Gene No.    | 47029  | Strand  | -                    |
| Start       | 1097   | End     | 1396                 |
| Name        | OJ990915_16.9A18.C21.o2.np                     | Method  | AAT/NAP              |
| Start       | 1097   | End     | 1396                 |
| GI          | 6815099  | Score   | 88                   |
| Exons       | 1097..1396                                     |         |                      |
| GI Descrip. | (AP001081) hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22585  | Seq. ID | OJ990915_16.9A18.C22 |
| Gene No.    | 47030  | Strand  | +                    |
| Start       | 1  | End     | 955                  |
| Name        | OJ990915_16.9A18.C22.o1.np                                 | Method  | AAT/NAP              |
| Start       | 1  | End     | 955                  |
| GI          | 3176726  | Score   | 313                  |
| Exons       | 1..32, 569..955  |         |                      |
| GI Descrip. | (AC002392) putative serine protease [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22585                                  | Seq. ID | OJ990915_16.9A18.C22 |
| Gene No. | 47030                                  | Strand  | +                    |
| Start    | 1                                      | End     | 955                  |
| Name     | OJ990915_16.9A18.C22.o1.ts             | Method  | TBLASTX:Soybean      |
| Start    | 571                                    | End     | 876                  |
| GI       | none                                   | Score   | 351                  |
| Exons    | 571..861, 590..868, 599..865, 679..876 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22585                      | Seq. ID | OJ990915_16.9A18.C22 |
| Gene No. | 47030                      | Strand  | +                    |
| Start    | 1                          | End     | 955                  |
| Name     | OJ990915_16.9A18.C22.o1.gs | Method  | GENSCAN              |
| Start    | 593                        | End     | 860                  |
| GI       | none                       | Score   | .61                  |
| Exons    | 593..860                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22585                      | Seq. ID | OJ990915_16.9A18.C22 |
| Gene No. | 47030                      | Strand  | +                    |
| Start    | 1                          | End     | 955                  |
| Name     | OJ990915_16.9A18.C22.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 613                        | End     | 865                  |
| GI       | none                       | Score   | 200                  |
| Exons    | 613..861, 635..865         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22585                                  | Seq. ID | OJ990915_16.9A18.C22 |
| Gene No. | 47030                                  | Strand  | +                    |
| Start    | 1                                      | End     | 955                  |
| Name     | OJ990915_16.9A18.C22.o1.tw             | Method  | TBLASTX:Wheat        |
| Start    | 642                                    | End     | 865                  |
| GI       | none                                   | Score   | 150                  |
| Exons    | 642..845, 642..860, 643..861, 644..865 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22585                                  | Seq. ID | OJ990915_16.9A18.C22 |
| Gene No. | 47030                                  | Strand  | +                    |
| Start    | 1                                      | End     | 955                  |
| Name     | OJ990915_16.9A18.C22.o1.tc             | Method  | TBLASTX:Cress        |
| Start    | 694                                    | End     | 870                  |
| GI       | none                                   | Score   | 226                  |
| Exons    | 694..861, 695..865, 750..863, 760..870 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22585   | Seq. ID | OJ990915_16.9A18.C22 |
| Gene No.    | 47030   | Strand  | +                    |
| Start       | 1   | End     | 955                  |
| Name        | OJ990915_16.9A18.C22.o1.gp  | Method  | AAT/GAP              |
| Start       | 712   | End     | 872                  |
| GI          | 3106804   | Score   | 283                  |
| Exons       | 712..872  |         |                      |
| GI Descrip. | 4938478/emb CAB43837.1  6.0e-48 (AL078464) proteinase-like protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22586                      | Seq. ID | OJ990915_16.9A18.C23 |
| Gene No. | 47031                      | Strand  | +                    |
| Start    | 124                        | End     | 430                  |
| Name     | OJ990915_16.9A18.C23.o1.gs | Method  | GENSCAN              |
| Start    | 124                        | End     | 430                  |
| GI       | none                       | Score   | .71                  |
| Exons    | 124..169, 360..430         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22587  | Seq. ID | OJ990915_16.9A18.C24 |
| Gene No. | 47032  | Strand  | +                    |
| Start    | 165  | End     | 1177                 |
| Name     | OJ990915_16.9A18.C24.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 163  | End     | 929                  |
| GI       | none   | Score   | 107                  |
| Exons    | 163..240, 163..234, 313..387, 326..394, 478..525, 857..925, 858..929 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22587  | Seq. ID | OJ990915_16.9A18.C24 |
| Gene No. | 47032  | Strand  | +                    |
| Start    | 165  | End     | 1177                 |
| Name     | OJ990915_16.9A18.C24.o1.gs                         | Method  | GENSCAN              |
| Start    | 165  | End     | 1168                 |
| GI       | none   | Score   | .8                   |
| Exons    | 165..239, 315..389, 477..524, 860..928, 1006..1168 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22587  | Seq. ID | OJ990915_16.9A18.C24 |
| Gene No.    | 47032  | Strand  | +                    |
| Start       | 165  | End     | 1177                 |
| Name        | OJ990915_16.9A18.C24.o1.np                         | Method  | AAT/NAP              |
| Start       | 165  | End     | 1177                 |
| GI          | 3885340  | Score   | 260                  |
| Exons       | 165..239, 315..389, 477..524, 817..928, 1006..1177 |         |                      |
| GI Descrip. | (AC005623) unknown protein [Arabidopsis thaliana]  |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22588   | Seq. ID | OJ990915_16.9A18.C25 |
| Gene No.    | 47033   | Strand  | +                    |
| Start       | 1   | End     | 1953                 |
| Name        | OJ990915_16.9A18.C25.o1.gp  | Method  | AAT/GAP              |
| Start       | 1   | End     | 1184                 |
| GI          | LIB3433-051-P1-K1-G7  | Score   | 845                  |
| Exons       | 1..326, 405..453, 1092..1184  |         |                      |
| GI Descrip. | '4938478/emb CAB43837.1  6.0e-48 (AL078464) proteinase-like protein [Arabidopsis thaliana]' |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22588 | Seq. ID | OJ990915_16.9A18.C25 |
| Gene No. | 47033 | Strand  | +                    |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 1  | End    | 1953    |
| Name        | OJ990915_16.9A18.C25.o1.np                                       | Method | AAT/NAP |
| Start       | 1  | End    | 1950    |
| GI          | 3885340  | Score  | 717     |
| Exons       | 1..326, 405..453, 1086..1327, 1413..1503, 1540..1607, 1893..1950 |        |         |
| GI Descrip. | (AC005623) unknown protein [Arabidopsis thaliana]                |        |         |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22588   | Seq. ID | OJ990915_16.9A18.C25 |
| Gene No. | 47033   | Strand  | +                    |
| Start    | 1   | End     | 1953                 |
| Name     | OJ990915_16.9A18.C25.o1.gs                            | Method  | GENSCAN              |
| Start    | 85  | End     | 1953                 |
| GI       | none  | Score   | .98                  |
| Exons    | 85..326, 405..453, 1092..1327, 1413..1607, 1893..1953 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22588   | Seq. ID | OJ990915_16.9A18.C25 |
| Gene No. | 47034   | Strand  | -                    |
| Start    | 1885  | End     | 2155                 |
| Name     | OJ990915_16.9A18.C25.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 1   | End     | 1242                 |
| GI       | none  | Score   | 447                  |
| Exons    | 1..324, 1..330, 27..326, 403..459, 404..460, 405..458, 1090..1242 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22588  | Seq. ID | OJ990915_16.9A18.C25 |
| Gene No. | 47034  | Strand  | -                    |
| Start    | 1885   | End     | 2155                 |
| Name     | OJ990915_16.9A18.C25.o1.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 133  | End     | 444                  |
| GI       | none   | Score   | 306                  |
| Exons    | 133..324, 138..326, 150..326, 402..440, 403..444, 405..443 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22588  | Seq. ID | OJ990915_16.9A18.C25 |
| Gene No. | 47034  | Strand  | -                    |
| Start    | 1885   | End     | 2155                 |
| Name     | OJ990915_16.9A18.C25.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 196  | End     | 1956                 |
| GI       | none   | Score   | 195                  |
| Exons    | 196..324, 198..326, 403..453, 405..452, 1101..1163, 1272..1328, 1299..1328, 1413..1448, 1414..1443, 1567..1593, 1909..1956 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22588  | Seq. ID | OJ990915_16.9A18.C25 |
| Gene No. | 47034  | Strand  | -                    |
| Start    | 1885   | End     | 2155                 |
| Name     | OJ990915_16.9A18.C25.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 1243   | End     | 1953                 |
| GI       | none   | Score   | 116                  |
| Exons    | 1243..1326, 1248..1328, 1387..1605, 1414..1476, 1424..1606, 1425..1610, 1878..1952, 1891..1953 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22588                      | Seq. ID | OJ990915_16.9A18.C25 |
| Gene No. | 47034                      | Strand  | -                    |
| Start    | 1885                       | End     | 2155                 |
| Name     | OJ990915_16.9A18.C25.o2.gp | Method  | AAT/GAP              |
| Start    | 1885                       | End     | 2155                 |
| GI       | 3107137                    | Score   | 485                  |
| Exons    | 1885..2155                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22589   | Seq. ID | OJ990915_16.9A18.C26 |
| Gene No.    | 47035   | Strand  | +                    |
| Start       | 1   | End     | 602                  |
| Name        | OJ990915_16.9A18.C26.ol.np                                | Method  | AAT/NAP              |
| Start       | 1   | End     | 581                  |
| GI          | 4938478   | Score   | 391                  |
| Exons       | 1..57, 166..581   |         |                      |
| GI Descrip. | (AL078464) proteinase-like protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22589  | Seq. ID | OJ990915_16.9A18.C26 |
| Gene No. | 47035  | Strand  | +                    |
| Start    | 1  | End     | 602                  |
| Name     | OJ990915_16.9A18.C26.ol.tm   | Method  | TBLASTX:Maize        |
| Start    | 2  | End     | 602                  |
| GI       | none   | Score   | 90                   |
| Exons    | 2..58, 3..59, 123..581, 142..309, 168..395, 179..583, 293..583, 438..602 |         |                      |

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 22589                                | Seq. ID | OJ990915_16.9A18.C26 |
| Gene No. | 47035                                | Strand  | +                    |
| Start    | 1                                    | End     | 602                  |
| Name     | OJ990915_16.9A18.C26.ol.tc           | Method  | TBLASTX:Cress        |
| Start    | 18                                   | End     | 578                  |
| GI       | none                                 | Score   | 55                   |
| Exons    | 18..56, 168..224, 270..578, 284..571 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22589                                  | Seq. ID | OJ990915_16.9A18.C26 |
| Gene No. | 47035                                  | Strand  | +                    |
| Start    | 1                                      | End     | 602                  |
| Name     | OJ990915_16.9A18.C26.ol.ts             | Method  | TBLASTX:Soybean      |
| Start    | 147                                    | End     | 578                  |
| GI       | none                                   | Score   | 51                   |
| Exons    | 147..224, 273..365, 359..571, 360..578 |         |                      |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22590                     | Seq. ID | OJ990325_03.9A14.C1 |
| Gene No. | 47036                     | Strand  | -                   |
| Start    | 73                        | End     | 206                 |
| Name     | OJ990325_03.9A14.C1.ol.gs | Method  | GENSCAN             |
| Start    | 73                        | End     | 206                 |
| GI       | none                      | Score   | .85                 |
| Exons    | 73..206                   |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22591   | Seq. ID | OJ990325_03.9A14.C2 |
| Gene No.    | 47037   | Strand  | +                   |
| Start       | 207   | End     | 392                 |
| Name        | OJ990325_03.9A14.C2.ol.gp   | Method  | AAT/GAP             |
| Start       | 207   | End     | 392                 |
| GI          | 49939_1.R1084   | Score   | 330                 |
| Exons       | 207..392  |         |                     |
| GI Descrip. | '854361/emb CAA41685.1  3.0e-51 (X58877) beta-glucanase [Oryza sativa]' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22592                     | Seq. ID | OJ990325_03.9A14.C7 |
| Gene No. | 47038                     | Strand  | -                   |
| Start    | 208                       | End     | 313                 |
| Name     | OJ990325_03.9A14.C7.ol.np | Method  | AAT/NAP             |



|             |  |       |     |
|-------------|--|-------|-----|
| Start       | 208  | End   | 313 |
| GI          | 6721561  | Score | 77  |
| Exons       | 208..313   |       |     |
| GI Descrip. | (AP001073) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa]                            |       |     |
|             | gi 6815086 dbj BAA90372.1  (AP001081) EST AU082058(C12976) corresponds to a region of the predicted gene.; hypothetical protein [Oryza sativa] |       |     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22593                     | Seq. ID | OJ990325_03.9A14.C9 |
| Gene No. | 47039                     | Strand  | -                   |
| Start    | 17                        | End     | 350                 |
| Name     | OJ990325_03.9A14.C9.o1.gs | Method  | GENSCAN             |
| Start    | 17                        | End     | 350                 |
| GI       | none                      | Score   | .8                  |
| Exons    | 17..134, 223..350         |         |                     |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22594  | Seq. ID | OJ990325_03.9A14.C11 |
| Gene No.    | 47040  | Strand  | -                    |
| Start       | 1  | End     | 147                  |
| Name        | OJ990325_03.9A14.C11.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 147                  |
| GI          | 6539585  | Score   | 206                  |
| Exons       | 1..147   |         |                      |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22595                      | Seq. ID | OJ990325_03.9A14.C13 |
| Gene No. | 47041                      | Strand  | -                    |
| Start    | 228                        | End     | 491                  |
| Name     | OJ990325_03.9A14.C13.o1.gs | Method  | GENSCAN              |
| Start    | 228                        | End     | 491                  |
| GI       | none                       | Score   | .41                  |
| Exons    | 228..491                   |         |                      |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22596                            | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47042                            | Strand  | +                    |
| Start    | 195                              | End     | 1948                 |
| Name     | OJ990325_03.9A14.C14.o1.gs       | Method  | GENSCAN              |
| Start    | 195                              | End     | 1948                 |
| GI       | none                             | Score   | .57                  |
| Exons    | 195..338, 1389..1617, 1758..1948 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22596   | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No.    | 47043   | Strand  | -                    |
| Start       | 1   | End     | 25655                |
| Name        | OJ990325_03.9A14.C14.o2.np                    | Method  | AAT/NAP              |
| Start       | 1   | End     | 22036                |
| GI          | 2462052                                       | Score   | 66                   |
| Exons       | 1..38, 2738..2812, 2939..3026, 22005..22036   |         |                      |
| GI Descrip. | (Y12080) SIS1 protein [Cryptococcus curvatus] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22596                      | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043                      | Strand  | -                    |
| Start    | 1                          | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 35                         | End     | 235                  |
| GI       | none                       | Score   | 209                  |

Exons 35..235, 113..235

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22596   | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043   | Strand  | -                    |
| Start    | 1   | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o2.gs  | Method  | GENSCAN              |
| Start    | 1995  | End     | 16618                |
| GI       | none  | Score   | .76                  |
| Exons    | 1995..2189, 2738..2875, 2948..3026, 3543..3766, 3916..4122, 4593..4662, 4761..4966, 5080..5232, 5655..6782, 8107..8166, 9131..9260, 9897..10136, 10272..12593, 12673..13458, 15580..15629, 15848..16024, 16256..16378, 16532..16618 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043  | Strand  | -                    |
| Start    | 1  | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 2047   | End     | 3984                 |
| GI       | none   | Score   | 59                   |
| Exons    | 2047..2085, 2055..2084, 2094..2147, 2145..2192, 2152..2190, 2723..2878, 2738..2914, 2945..3025, 2948..3025, 2949..3026, 3537..3749, 3538..3768, 3542..3769, 3912..3983, 3916..3984, 3916..3984 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22596   | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043   | Strand  | -                    |
| Start    | 1   | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o1.np  | Method  | AAT/NAP              |
| Start    | 2701  | End     | 19590                |
| GI       | 2618687   | Score   | 875                  |
| Exons    | 2701..2875, 2948..3026, 3543..3766, 3916..4122, 5080..5232, 9131..9260, 9897..10136, 10272..10320, 10363..10623, 10915..11479, 19531..19590 |         |                      |

GI Descrip. (AC002510) hypothetical protein [Arabidopsis thaliana]

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22596   | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043   | Strand  | -                    |
| Start    | 1   | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o2.tc                                    | Method  | TBLASTX:Cress        |
| Start    | 3916  | End     | 10141                |
| GI       | none  | Score   | 137                  |
| Exons    | 3916..4122, 3935..4093, 3957..4154, 9920..10021, 10073..10141 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043  | Strand  | -                    |
| Start    | 1  | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o7.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 4761   | End     | 5107                 |
| GI       | none   | Score   | 151                  |
| Exons    | 4761..4916, 4763..4909, 4901..4972, 4902..4967, 5081..5107 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22596                      | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043                      | Strand  | -                    |
| Start    | 1                          | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 5492                       | End     | 6067                 |
| GI       | none                       | Score   | 143                  |

Exons 5492..5647, 5673..6044, 5686..6009, 5876..6067

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043  | Strand  | -                    |
| Start    | 1  | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o1.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 5597   | End     | 5949                 |
| GI       | none   | Score   | 63                   |
| Exons    | 5597..5647, 5760..5945, 5760..5945, 5776..5949 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22596                      | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043                      | Strand  | -                    |
| Start    | 1                          | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o6.tm | Method  | TBLASTX:Maize        |
| Start    | 6069                       | End     | 6306                 |
| GI       | none                       | Score   | 93                   |
| Exons    | 6069..6305, 6070..6306     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22596                      | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043                      | Strand  | -                    |
| Start    | 1                          | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o3.tm | Method  | TBLASTX:Maize        |
| Start    | 6342                       | End     | 6761                 |
| GI       | none                       | Score   | 241                  |
| Exons    | 6342..6761, 6343..6759     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22596                      | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043                      | Strand  | -                    |
| Start    | 1                          | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o3.tw | Method  | TBLASTX:Wheat        |
| Start    | 6444                       | End     | 6764                 |
| GI       | none                       | Score   | 117                  |
| Exons    | 6444..6572, 6582..6764     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No.    | 47043  | Strand  | -                    |
| Start       | 1  | End     | 25655                |
| Name        | OJ990325_03.9A14.C14.o1.gp   | Method  | AAT/GAP              |
| Start       | 9897   | End     | 10050                |
| GI          | 15592_2.R1084  | Score   | 287                  |
| Exons       | 9897..10050  |         |                      |
| GI Descrip. | '2618687 2.0e-14 (AC002510) hypothetical protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043  | Strand  | -                    |
| Start    | 1  | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o3.gs   | Method  | GENSCAN              |
| Start    | 17644  | End     | 24541                |
| GI       | none   | Score   | .58                  |
| Exons    | 17644..18129, 18522..18912, 22739..22951, 23036..23298, 23400..23660, 23744..23871, 23950..24541 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22596                      | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043                      | Strand  | -                    |
| Start    | 1                          | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o3.np | Method  | AAT/NAP              |

|             |  |       |       |
|-------------|--|-------|-------|
| Start       | 22568  | End   | 25655 |
| GI          | 2618686  | Score | 1564  |
| Exons       | 22568..22951, 23036..23298, 23400..23660, 23744..23871, 23950..24457, 25617..25655 |       |       |
| GI Descrip. | (AC002510) putative cytokinin oxidase [Arabidopsis thaliana]                       |       |       |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043  | Strand  | -                    |
| Start    | 1  | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o3.tc   | Method  | TBLASTX:Cress        |
| Start    | 22633  | End     | 22969                |
| GI       | none   | Score   | 133                  |
| Exons    | 22633..22911, 22634..22834, 22847..22969, 22876..22953, 22895..22960 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043  | Strand  | -                    |
| Start    | 1  | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 22657  | End     | 23876                |
| GI       | none   | Score   | 184                  |
| Exons    | 22657..22911, 22658..22858, 22864..22953, 22877..22951, 23033..23299, 23035..23301, 23400..23660, 23413..23598, 23462..23677, 23721..23876, 23741..23872 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043  | Strand  | -                    |
| Start    | 1  | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 22726  | End     | 23624                |
| GI       | none   | Score   | 134                  |
| Exons    | 22726..22857, 22726..22884, 22879..22953, 22880..22951, 23033..23317, 23035..23301, 23151..23321, 23398..23592, 23400..23624, 23400..23624 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No.    | 47043  | Strand  | -                    |
| Start       | 1  | End     | 25655                |
| Name        | OJ990325_03.9A14.C14.o2.gp   | Method  | AAT/GAP              |
| Start       | 22774  | End     | 23277                |
| GI          | LIB3431-043-P1-K1-D1   | Score   | 971                  |
| Exons       | 22774..23277   |         |                      |
| GI Descrip. | '2618686 5.0e-39 (AC002510) hypothetical protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043  | Strand  | -                    |
| Start    | 1  | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o4.tc                             | Method  | TBLASTX:Cress        |
| Start    | 23032  | End     | 23304                |
| GI       | none   | Score   | 85                   |
| Exons    | 23032..23073, 23074..23304, 23098..23241, 23099..23242 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22596                      | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043                      | Strand  | -                    |
| Start    | 1                          | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o1.tc | Method  | TBLASTX:Cress        |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 23502  | End   | 24128 |
| GI    | none   | Score | 152   |
| Exons | 23502..23579, 23592..23663, 23733..23903, 23739..23828,<br>23741..23872, 23938..24090, 23939..24121, 23940..24110,<br>23982..24128 |       |       |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22596                                    | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043                                    | Strand  | -                    |
| Start    | 1  | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o3.ts               | Method  | TBLASTX:Soybean      |
| Start    | 23930                                    | End     | 24151                |
| GI       | none                                     | Score   | 156                  |
| Exons    | 23930..24091, 23937..24083, 24104..24151 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22596  | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043  | Strand  | -                    |
| Start    | 1  | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o2.ts                             | Method  | TBLASTX:Soybean      |
| Start    | 24203  | End     | 24454                |
| GI       | none   | Score   | 76                   |
| Exons    | 24203..24400, 24209..24346, 24231..24392, 24395..24454 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22596                      | Seq. ID | OJ990325_03.9A14.C14 |
| Gene No. | 47043                      | Strand  | -                    |
| Start    | 1                          | End     | 25655                |
| Name     | OJ990325_03.9A14.C14.o5.tm | Method  | TBLASTX:Maize        |
| Start    | 24276                      | End     | 24479                |
| GI       | none                       | Score   | 210                  |
| Exons    | 24276..24479, 24281..24478 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22597                      | Seq. ID | OJ990325_03.9A14.C15 |
| Gene No. | 47044                      | Strand  | +                    |
| Start    | 769                        | End     | 893                  |
| Name     | OJ990325_03.9A14.C15.o1.gs | Method  | GENSCAN              |
| Start    | 769                        | End     | 893                  |
| GI       | none                       | Score   | .63                  |
| Exons    | 769..893                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22597                      | Seq. ID | OJ990325_03.9A14.C15 |
| Gene No. | 47045                      | Strand  | -                    |
| Start    | 1547                       | End     | 1681                 |
| Name     | OJ990325_03.9A14.C15.o2.gs | Method  | GENSCAN              |
| Start    | 1547                       | End     | 1681                 |
| GI       | none                       | Score   | .47                  |
| Exons    | 1547..1681                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22598                      | Seq. ID | OJ990325_03.9A14.C16 |
| Gene No. | 47046                      | Strand  | -                    |
| Start    | 326                        | End     | 468                  |
| Name     | OJ990325_03.9A14.C16.o1.gs | Method  | GENSCAN              |
| Start    | 326                        | End     | 468                  |
| GI       | none                       | Score   | .79                  |
| Exons    | 326..468                   |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22599 | Seq. ID | OJ990325_03.9A14.C17 |
| Gene No. | 47047 | Strand  | -                    |
| Start    | 607   | End     | 750                  |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Name        | OJ990325_03.9A14.C17.o1.gs  | Method  | GENSCAN              |
| Start       | 607   | End     | 750                  |
| GI          | none  | Score   | .54                  |
| Exons       | 607..750  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22599   | Seq. ID | OJ990325_03.9A14.C17 |
| Gene No.    | 47048   | Strand  | -                    |
| Start       | 1397  | End     | 1539                 |
| Name        | OJ990325_03.9A14.C17.o2.gs  | Method  | GENSCAN              |
| Start       | 1397  | End     | 1539                 |
| GI          | none  | Score   | .45                  |
| Exons       | 1397..1539  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22600   | Seq. ID | OJ990325_03.9A14.C18 |
| Gene No.    | 47049   | Strand  | +                    |
| Start       | 56  | End     | 1938                 |
| Name        | OJ990325_03.9A14.C18.o1.gs  | Method  | GENSCAN              |
| Start       | 56  | End     | 1938                 |
| GI          | none  | Score   | .67                  |
| Exons       | 56..186, 256..474, 551..724, 903..941, 1047..1172, 1264..1380, 1807..1938   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22601   | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No.    | 47050   | Strand  | +                    |
| Start       | 210   | End     | 851                  |
| Name        | OJ990325_03.9A14.C19.o1.gs  | Method  | GENSCAN              |
| Start       | 210   | End     | 851                  |
| GI          | none  | Score   | .48                  |
| Exons       | 210..326, 693..851  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22601   | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No.    | 47051   | Strand  | -                    |
| Start       | 2136  | End     | 3458                 |
| Name        | OJ990325_03.9A14.C19.o1.gp  | Method  | AAT/GAP              |
| Start       | 1697  | End     | 2215                 |
| GI          | none  | Score   | 838                  |
| Exons       | 1697..1940, 2019..2215  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22601   | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No.    | 47051   | Strand  | -                    |
| Start       | 2136  | End     | 3458                 |
| Name        | OJ990325_03.9A14.C19.o2.gs  | Method  | GENSCAN              |
| Start       | 2136  | End     | 3458                 |
| GI          | none  | Score   | 1                    |
| Exons       | 2136..3458  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22601   | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No.    | 47051   | Strand  | -                    |
| Start       | 2136  | End     | 3458                 |
| Name        | OJ990325_03.9A14.C19.o1.np  | Method  | AAT/NAP              |
| Start       | 2154  | End     | 3455                 |
| GI          | 549010  | Score   | 1804                 |
| Exons       | 2154..3455  |         |                      |
| GI Descrip. | EUKARYOTIC PEPTIDE CHAIN RELEASE FACTOR SUBUNIT 1 (ERF1).<br>(OMNIPOTENT SUPPRESSOR PROTEIN 1 HOMOLOG) (SUP1 HOMOLOG)<br>gi 322554 pir  S31328 omnipotent suppressor protein SUP1 homolog<br>(clone G18) - Arabidopsis thaliana gi 16514 emb CAA49172 |         |                      |

(X69375) similar to yeast omnipotent suppressor protein SUP1 (SUP45) [Arabidopsis thaliana] gi|1402882|emb|CAA66813| (X98130) euka

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22601   | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No.    | 47051   | Strand  | -                    |
| Start       | 2136  | End     | 3458                 |
| Name        | OJ990325_03.9A14.C19.o2.gp  | Method  | AAT/GAP              |
| Start       | 2722  | End     | 3205                 |
| GI          | 34805_1.R1084   | Score   | 968                  |
| Exons       | 2722..3205  |         |                      |
| GI Descrip. | '549010/sp P35614 ERF1_ARATH 2.0e-79 EUKARYOTIC PEPTIDE CHAIN RELEASE FACTOR SUBUNIT 1 (ERF1) (OMNIPOTENT SUPPRESSOR PROTEIN 1 HOMOLOG) (SUP1 HOMOLOG) >gi_322554_pir_S31328 omnipotent suppressor protein SUP1 homolog (clone G18) - Arabidopsis thaliana >gi_16514_emb_CAA49172_ (X69375) similar to yeast omnipotent suppressor protein SUP1 (SUP45) [Arabidopsis thaliana] >gi_1402882_emb_C' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22601  | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No. | 47052  | Strand  | -                    |
| Start    | 4548   | End     | 6170                 |
| Name     | OJ990325_03.9A14.C19.o3.gs   | Method  | GENSCAN              |
| Start    | 4548   | End     | 6170                 |
| GI       | none   | Score   | .67                  |
| Exons    | 4548..4552, 4723..4810, 5048..5161, 5311..5402, 5697..5925, 6009..6170 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22601  | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No. | 47053  | Strand  | -                    |
| Start    | 7894   | End     | 8426                 |
| Name     | OJ990325_03.9A14.C19.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 2032   | End     | 2378                 |
| GI       | none   | Score   | 72                   |
| Exons    | 2032..2073, 2033..2089, 2034..2069, 2062..2112, 2063..2110, 2120..2356, 2121..2363, 2208..2378, 2248..2376 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22601                              | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No. | 47053                              | Strand  | -                    |
| Start    | 7894                               | End     | 8426                 |
| Name     | OJ990325_03.9A14.C19.o1.tc         | Method  | TBLASTX:Cress        |
| Start    | 2136                               | End     | 3446                 |
| GI       | none                               | Score   | 773                  |
| Exons    | 2136..3446, 2206..2301, 2211..3443 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22601  | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No. | 47053  | Strand  | -                    |
| Start    | 7894   | End     | 8426                 |
| Name     | OJ990325_03.9A14.C19.o1.tm                     | Method  | TBLASTX:Maize        |
| Start    | 2172   | End     | 3462                 |
| GI       | none   | Score   | 814                  |
| Exons    | 2172..3461, 2206..2340, 2211..3461, 3016..3462 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22601                      | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No. | 47053                      | Strand  | -                    |
| Start    | 7894                       | End     | 8426                 |
| Name     | OJ990325_03.9A14.C19.o1.ts | Method  | TBLASTX:Soybean      |

|       |  |       |      |
|-------|--|-------|------|
| Start | 2184   | End   | 3462 |
| GI    | none   | Score | 800  |
| Exons | 2184..3458, 2206..2397, 2211..3458, 3016..3462 |       |      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22601                              | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No. | 47053                              | Strand  | -                    |
| Start    | 7894                               | End     | 8426                 |
| Name     | OJ990325_03.9A14.C19.o1.tw         | Method  | TBLASTX:Wheat        |
| Start    | 2533                               | End     | 2984                 |
| GI       | none                               | Score   | 301                  |
| Exons    | 2533..2829, 2535..2984, 2893..2934 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22601  | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No. | 47053  | Strand  | -                    |
| Start    | 7894   | End     | 8426                 |
| Name     | OJ990325_03.9A14.C19.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 5309   | End     | 8366                 |
| GI       | none   | Score   | 223                  |
| Exons    | 5309..5368, 7903..8229, 7905..8228, 7931..8230, 7999..8232, 8319..8366, 8322..8363 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22601  | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No.    | 47053  | Strand  | -                    |
| Start       | 7894   | End     | 8426                 |
| Name        | OJ990325_03.9A14.C19.o3.gp   | Method  | AAT/GAP              |
| Start       | 7705   | End     | 8366                 |
| GI          | 3837_1.R1084   | Score   | 1094                 |
| Exons       | 7705..8229, 8322..8366   |         |                      |
| GI Descrip. | '4539408/emb CAB40041.1  3.0e-49 (AL049524) putative alpha NAC [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22601  | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No. | 47053  | Strand  | -                    |
| Start    | 7894   | End     | 8426                 |
| Name     | OJ990325_03.9A14.C19.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 7853   | End     | 8366                 |
| GI       | none   | Score   | 147                  |
| Exons    | 7853..8023, 7894..8229, 7908..8228, 7931..8230, 8002..8232, 8319..8363, 8322..8366 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22601  | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No. | 47053  | Strand  | -                    |
| Start    | 7894   | End     | 8426                 |
| Name     | OJ990325_03.9A14.C19.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 7858   | End     | 8363                 |
| GI       | none   | Score   | 73                   |
| Exons    | 7858..7947, 7888..8049, 7896..8048, 8035..8226, 8035..8229, 8072..8230, 8319..8363, 8319..8363 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22601  | Seq. ID | OJ990325_03.9A14.C19 |
| Gene No. | 47053  | Strand  | -                    |
| Start    | 7894   | End     | 8426                 |
| Name     | OJ990325_03.9A14.C19.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 7894   | End     | 8363                 |
| GI       | none   | Score   | 94                   |
| Exons    | 7894..8076, 7931..8002, 8050..8229, 8075..8230, 8319..8363, 8322..8363 |         |                      |



Seq. No. 22601  
 Gene No. 47053  
 Start 7894  
 Name OJ990325\_03.9A14.C19.o4.gs  
 Start 7894  
 GI none  
 Exons 7894..8229

Seq. ID OJ990325\_03.9A14.C19  
 Strand -  
 End 8426  
 Method GENSCAN  
 End 8229  
 Score .99

Seq. No. 22601  
 Gene No. 47053  
 Start 7894  
 Name OJ990325\_03.9A14.C19.o2.np  
 Start 7897  
 GI 6752882  
 Exons 7897..8229, 8322..8426

Seq. ID OJ990325\_03.9A14.C19  
 Strand -  
 End 8426  
 Method AAT/NAP  
 End 8426  
 Score 489

GI Descrip. (AF220200) nascent polypeptide associated complex alpha chain  
 [Pinus taeda]

Seq. No. 22602  
 Gene No. 47054  
 Start 291  
 Name OJ990325\_03.9A14.C20.o1.np  
 Start 291  
 GI 4680183  
 Exons 291..362

Seq. ID OJ990325\_03.9A14.C20  
 Strand +  
 End 362  
 Method AAT/NAP  
 End 362  
 Score 48

GI Descrip. (AF111709) gag-pol protein [Oryza sativa subsp. indica]

Seq. No. 22603  
 Gene No. 47055  
 Start 158  
 Name OJ990325\_03.9A14.C24.o1.gs  
 Start 158  
 GI none  
 Exons 158..261

Seq. ID OJ990325\_03.9A14.C24  
 Strand +  
 End 261  
 Method GENSCAN  
 End 261  
 Score .44

Seq. No. 22604  
 Gene No. 47056  
 Start 160  
 Name OJ990325\_03.9A14.C25.o1.gs  
 Start 160  
 GI none  
 Exons 160..249

Seq. ID OJ990325\_03.9A14.C25  
 Strand +  
 End 249  
 Method GENSCAN  
 End 249  
 Score .46

Seq. No. 22605  
 Gene No. 47057  
 Start 167  
 Name OJ990325\_03.9A14.C27.o1.gs  
 Start 167  
 GI none  
 Exons 167..298

Seq. ID OJ990325\_03.9A14.C27  
 Strand -  
 End 298  
 Method GENSCAN  
 End 298  
 Score .41

Seq. No. 22606  
 Gene No. 47058  
 Start 176  
 Name OJ990325\_03.9A14.C31.o1.gs  
 Start 176

Seq. ID OJ990325\_03.9A14.C31  
 Strand +  
 End 435  
 Method GENSCAN  
 End 435

|             |   |         |                      |
|-------------|---|---------|----------------------|
| GI          | none  | Score   | .42                  |
| Exons       | 176..435  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22607   | Seq. ID | OJ990325_03.9A14.C33 |
| Gene No.    | 47059   | Strand  | +                    |
| Start       | 1   | End     | 347                  |
| Name        | OJ990325_03.9A14.C33.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 347                  |
| GI          | 2618686   | Score   | 228                  |
| Exons       | 1..347  |         |                      |
| GI Descrip. | (AC002510) putative cytokinin oxidase [Arabidopsis thaliana]  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22607   | Seq. ID | OJ990325_03.9A14.C33 |
| Gene No.    | 47059   | Strand  | +                    |
| Start       | 1   | End     | 347                  |
| Name        | OJ990325_03.9A14.C33.ol.gp  | Method  | AAT/GAP              |
| Start       | 62  | End     | 141                  |
| GI          | LIB3431-043-P1-K1-D1  | Score   | 134                  |
| Exons       | 62..141   |         |                      |
| GI Descrip. | '2618686 5.0e-39 (AC002510) hypothetical protein [Arabidopsis thaliana]'  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22607   | Seq. ID | OJ990325_03.9A14.C33 |
| Gene No.    | 47059   | Strand  | +                    |
| Start       | 1   | End     | 347                  |
| Name        | OJ990325_03.9A14.C33.ol.ts  | Method  | TBLASTX:Soybean      |
| Start       | 64  | End     | 258                  |
| GI          | none  | Score   | 248                  |
| Exons       | 64..258, 72..257  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22607   | Seq. ID | OJ990325_03.9A14.C33 |
| Gene No.    | 47059   | Strand  | +                    |
| Start       | 1   | End     | 347                  |
| Name        | OJ990325_03.9A14.C33.ol.tc  | Method  | TBLASTX:Cress        |
| Start       | 67  | End     | 282                  |
| GI          | none  | Score   | 212                  |
| Exons       | 67..282, 81..281  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22608   | Seq. ID | OJ990325_03.9A14.C35 |
| Gene No.    | 47060   | Strand  | +                    |
| Start       | 1   | End     | 439                  |
| Name        | OJ990325_03.9A14.C35.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 439                  |
| GI          | 6069646   | Score   | 263                  |
| Exons       | 1..439  |         |                      |
| GI Descrip. | (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi 6907112 dbj BAA90639.1  (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa] |         |                      |
|             |   |         |                      |
| Seq. No.    | 22608   | Seq. ID | OJ990325_03.9A14.C35 |
| Gene No.    | 47060   | Strand  | +                    |
| Start       | 1   | End     | 439                  |
| Name        | OJ990325_03.9A14.C35.ol.tm  | Method  | TBLASTX:Maize        |
| Start       | 144   | End     | 438                  |
| GI          | none  | Score   | 57                   |

Exons 144..401, 175..414, 182..244, 241..438

Seq. No. 22609 Seq. ID OJ990325\_03.9A14.C36  
Gene No. 47061 Strand -  
Start 69 End 1157  
Name OJ990325\_03.9A14.C36.o1.np Method AAT/NAP  
Start 69 End 1157  
GI 6466937 Score 656  
Exons 69..1157  
GI Descrip. (AC011621) putative retroelement pol polyprotein [Arabidopsis thaliana]

Seq. No. 22609 Seq. ID OJ990325\_03.9A14.C36  
Gene No. 47061 Strand -  
Start 69 End 1157  
Name OJ990325\_03.9A14.C36.o1.tm Method TBLASTX:Maize  
Start 168 End 828  
GI none Score 88  
Exons 168..356, 169..321, 390..668, 424..726, 784..828

Seq. No. 22609 Seq. ID OJ990325\_03.9A14.C36  
Gene No. 47061 Strand -  
Start 69 End 1157  
Name OJ990325\_03.9A14.C36.o2.tw Method TBLASTX:Wheat  
Start 207 End 578  
GI none Score 94  
Exons 207..329, 207..407, 540..578

Seq. No. 22609 Seq. ID OJ990325\_03.9A14.C36  
Gene No. 47061 Strand -  
Start 69 End 1157  
Name OJ990325\_03.9A14.C36.o1.gs Method GENSCAN  
Start 357 End 803  
GI none Score .71  
Exons 357..803

Seq. No. 22609 Seq. ID OJ990325\_03.9A14.C36  
Gene No. 47061 Strand -  
Start 69 End 1157  
Name OJ990325\_03.9A14.C36.o1.tw Method TBLASTX:Wheat  
Start 591 End 1155  
GI none Score 85  
Exons 591..752, 793..1155, 923..1081

Seq. No. 22609 Seq. ID OJ990325\_03.9A14.C36  
Gene No. 47061 Strand -  
Start 69 End 1157  
Name OJ990325\_03.9A14.C36.o2.tm Method TBLASTX:Maize  
Start 829 End 1155  
GI none Score 183  
Exons 829..1155, 833..1135, 922..1137

Seq. No. 22609 Seq. ID OJ990325\_03.9A14.C36  
Gene No. 47061 Strand -  
Start 69 End 1157  
Name OJ990325\_03.9A14.C36.o1.ts Method TBLASTX:Soybean  
Start 907 End 1156

|             |   |         |                      |
|-------------|---|---------|----------------------|
| GI          | none  | Score   | 57                   |
| Exons       | 907..945, 931..1008, 938..1009, 1019..1156, 1021..1155                  |         |                      |
| Seq. No.    | 22610   | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No.    | 47062   | Strand  | -                    |
| Start       | 1   | End     | 5061                 |
| Name        | OJ990325_03.9A14.C37.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 4833                 |
| GI          | 6466937   | Score   | 1656                 |
| Exons       | 1..3232, 4732..4833   |         |                      |
| GI Descrip. | (AC011621) putative retroelement pol polyprotein [Arabidopsis thaliana] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22610   | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No.    | 47062   | Strand  | -                    |
| Start       | 1   | End     | 5061                 |
| Name        | OJ990325_03.9A14.C37.o2.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 4814                 |
| GI          | 6466937   | Score   | 1649                 |
| Exons       | 1..3306, 4781..4814   |         |                      |
| GI Descrip. | (AC011621) putative retroelement pol polyprotein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22610                      | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062                      | Strand  | -                    |
| Start    | 1                          | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o3.tm | Method  | TBLASTX:Maize        |
| Start    | 49                         | End     | 323                  |
| GI       | none                       | Score   | 70                   |
| Exons    | 49..180, 54..323           |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22610                      | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062                      | Strand  | -                    |
| Start    | 1                          | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 51                         | End     | 443                  |
| GI       | none                       | Score   | 44                   |
| Exons    | 51..443, 52..156, 141..422 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22610                      | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062                      | Strand  | -                    |
| Start    | 1                          | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 141                        | End     | 557                  |
| GI       | none                       | Score   | 100                  |
| Exons    | 141..461, 459..557         |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22610   | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062   | Strand  | -                    |
| Start    | 1   | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o1.gs  | Method  | GENSCAN              |
| Start    | 162   | End     | 5061                 |
| GI       | none  | Score   | .44                  |
| Exons    | 162..1102, 1495..1803, 2662..3617, 4105..4242, 4292..4320, 4635..4712, 4783..5061 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22610 | Seq. ID | OJ990325_03.9A14.C37 |
|----------|-------|---------|----------------------|

|          |  |         |                      |
|----------|--|---------|----------------------|
| Gene No. | 47062  | Strand  | -                    |
| Start    | 1  | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o5.tm                                   | Method  | TBLASTX:Maize        |
| Start    | 324  | End     | 638                  |
| GI       | none   | Score   | 42                   |
| Exons    | 324..638, 325..423, 471..623                                 |         |                      |
|          |  |         |                      |
| Seq. No. | 22610  | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062  | Strand  | -                    |
| Start    | 1  | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o2.tm                                   | Method  | TBLASTX:Maize        |
| Start    | 593  | End     | 1163                 |
| GI       | none   | Score   | 34                   |
| Exons    | 593..613, 639..929, 655..849, 904..999, 912..1163, 913..1161 |         |                      |
|          |  |         |                      |
| Seq. No. | 22610  | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062  | Strand  | -                    |
| Start    | 1  | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o1.ts                                   | Method  | TBLASTX:Soybean      |
| Start    | 912  | End     | 1247                 |
| GI       | none   | Score   | 287                  |
| Exons    | 912..1247  |         |                      |
|          |  |         |                      |
| Seq. No. | 22610  | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062  | Strand  | -                    |
| Start    | 1  | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o3.tw                                   | Method  | TBLASTX:Wheat        |
| Start    | 997  | End     | 1250                 |
| GI       | none   | Score   | 87                   |
| Exons    | 997..1248, 1008..1250, 1017..1250                            |         |                      |
|          |  |         |                      |
| Seq. No. | 22610  | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062  | Strand  | -                    |
| Start    | 1  | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o1.tm                                   | Method  | TBLASTX:Maize        |
| Start    | 1182   | End     | 1660                 |
| GI       | none   | Score   | 168                  |
| Exons    | 1182..1244, 1253..1660, 1266..1652                           |         |                      |
|          |  |         |                      |
| Seq. No. | 22610  | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062  | Strand  | -                    |
| Start    | 1  | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o1.tc                                   | Method  | TBLASTX:Cress        |
| Start    | 1238   | End     | 1588                 |
| GI       | none   | Score   | 188                  |
| Exons    | 1238..1588   |         |                      |
|          |  |         |                      |
| Seq. No. | 22610  | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062  | Strand  | -                    |
| Start    | 1  | End     | 5061                 |
| Name     | OJ990325_03.9A14.C37.o1.tw                                   | Method  | TBLASTX:Wheat        |
| Start    | 1268   | End     | 1717                 |
| GI       | none   | Score   | 184                  |
| Exons    | 1268..1717, 1275..1613, 1277..1717                           |         |                      |
|          |  |         |                      |
| Seq. No. | 22610  | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No. | 47062  | Strand  | -                    |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Start       | 1  | End     | 5061                 |
| Name        | OJ990325_03.9A14.C37.o2.ts   | Method  | TBLASTX:Soybean      |
| Start       | 1367   | End     | 1702                 |
| GI          | none   | Score   | 67                   |
| Exons       | 1367..1702, 1416..1655   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22610  | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No.    | 47062  | Strand  | -                    |
| Start       | 1  | End     | 5061                 |
| Name        | OJ990325_03.9A14.C37.o4.tm   | Method  | TBLASTX:Maize        |
| Start       | 2192   | End     | 2534                 |
| GI          | none   | Score   | 59                   |
| Exons       | 2192..2374, 2249..2368, 2453..2533, 2463..2534   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22610  | Seq. ID | OJ990325_03.9A14.C37 |
| Gene No.    | 47062  | Strand  | -                    |
| Start       | 1  | End     | 5061                 |
| Name        | OJ990325_03.9A14.C37.o6.tm   | Method  | TBLASTX:Maize        |
| Start       | 2687   | End     | 3088                 |
| GI          | none   | Score   | 92                   |
| Exons       | 2687..2944, 2963..3088   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22611  | Seq. ID | OJ990325_03.9A14.C39 |
| Gene No.    | 47063  | Strand  | +                    |
| Start       | 156  | End     | 2096                 |
| Name        | OJ990325_03.9A14.C39.o1.gs   | Method  | GENSCAN              |
| Start       | 156  | End     | 2096                 |
| GI          | none   | Score   | .6                   |
| Exons       | 156..296, 1138..1181, 1987..2096   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22612  | Seq. ID | OJ990325_03.9A14.C40 |
| Gene No.    | 47064  | Strand  | +                    |
| Start       | 119  | End     | 821                  |
| Name        | OJ990325_03.9A14.C40.o1.np   | Method  | AAT/NAP              |
| Start       | 119  | End     | 821                  |
| GI          | 6539585  | Score   | 219                  |
| Exons       | 119..292, 750..821   |         |                      |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22613  | Seq. ID | OJ990325_03.9A14.C41 |
| Gene No.    | 47065  | Strand  | -                    |
| Start       | 271  | End     | 1129                 |
| Name        | OJ990325_03.9A14.C41.o1.gs   | Method  | GENSCAN              |
| Start       | 271  | End     | 1129                 |
| GI          | none   | Score   | .84                  |
| Exons       | 271..334, 438..608, 1119..1129   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22614  | Seq. ID | OJ990325_03.9A14.C42 |
| Gene No.    | 47066  | Strand  | -                    |
| Start       | 684  | End     | 6580                 |
| Name        | OJ990325_03.9A14.C42.o1.gs   | Method  | GENSCAN              |
| Start       | 684  | End     | 6564                 |
| GI          | none   | Score   | .59                  |
| Exons       | 684..806, 1149..1378, 1500..1854, 3569..3862, 3966..4047, 4746..4873, 4950..5048, 5166..5321, 6547..6564 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22614  | Seq. ID | OJ990325_03.9A14.C42 |

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 47066  | Strand | -             |
| Start    | 684  | End    | 6580          |
| Name     | OJ990325_03.9A14.C42.o2.tm   | Method | TBLASTX:Maize |
| Start    | 3303   | End    | 3811          |
| GI       | none   | Score  | 36            |
| Exons    | 3303..3332, 3313..3339, 3447..3710, 3461..3676, 3721..3810, 3740..3811 |        |               |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22614  | Seq. ID | OJ990325_03.9A14.C42 |
| Gene No.    | 47066  | Strand  | -                    |
| Start       | 684  | End     | 6580                 |
| Name        | OJ990325_03.9A14.C42.o1.np   | Method  | AAT/NAP              |
| Start       | 3494   | End     | 6580                 |
| GI          | 3087888  | Score   | 390                  |
| Exons       | 3494..3688, 3716..3862, 3966..4105, 4800..4873, 4950..5048, 5166..5321, 6547..6580 |         |                      |
| GI Descrip. | (X94302) hexokinase [Solanum tuberosum]  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22614  | Seq. ID | OJ990325_03.9A14.C42 |
| Gene No. | 47066  | Strand  | -                    |
| Start    | 684  | End     | 6580                 |
| Name     | OJ990325_03.9A14.C42.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3525   | End     | 5321                 |
| GI       | none   | Score   | 75                   |
| Exons    | 3525..3554, 3542..3676, 3543..3707, 4775..4870, 4776..4871, 4947..5060, 4999..5049, 5164..5274, 5175..5321 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22614  | Seq. ID | OJ990325_03.9A14.C42 |
| Gene No. | 47066  | Strand  | -                    |
| Start    | 684  | End     | 6580                 |
| Name     | OJ990325_03.9A14.C42.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 3542   | End     | 5321                 |
| GI       | none   | Score   | 61                   |
| Exons    | 3542..3676, 3543..3683, 3807..3845, 3966..4058, 4775..4867, 4776..4871, 4947..5072, 5019..5045, 5163..5321, 5164..5307 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22614  | Seq. ID | OJ990325_03.9A14.C42 |
| Gene No. | 47066  | Strand  | -                    |
| Start    | 684  | End     | 6580                 |
| Name     | OJ990325_03.9A14.C42.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 3812   | End     | 5342                 |
| GI       | none   | Score   | 83                   |
| Exons    | 3812..3904, 3966..4058, 3970..4059, 3972..4061, 4718..4876, 4739..4873, 4746..4874, 4949..5047, 4950..5048, 4950..5072, 4963..5049, 5163..5321, 5175..5342 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22615                                    | Seq. ID | OJ990325_03.9A14.C43 |
| Gene No.    | 47067                                    | Strand  | -                    |
| Start       | 1  | End     | 1136                 |
| Name        | OJ990325_03.9A14.C43.o1.np               | Method  | AAT/NAP              |
| Start       | 1  | End     | 1136                 |
| GI          | 6634723                                  | Score   | 206                  |
| Exons       | 1..17, 221..315, 691..870, 946..1136     |         |                      |
| GI Descrip. | (AC012463) T2E6.6 [Arabidopsis thaliana] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22615 | Seq. ID | OJ990325_03.9A14.C43 |
| Gene No. | 47067 | Strand  | -                    |

|       |   |        |               |
|-------|---|--------|---------------|
| Start | 1   | End    | 1136          |
| Name  | OJ990325_03.9A14.C43.o1.tm  | Method | TBLASTX:Maize |
| Start | 185   | End    | 1060          |
| GI    | none  | Score  | 89            |
| Exons | 185..316, 186..323, 238..327, 239..328, 673..879, 701..871, 706..873, 928..1011, 932..982, 988..1059, 989..1060 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22615                      | Seq. ID | OJ990325_03.9A14.C43 |
| Gene No. | 47067                      | Strand  | -                    |
| Start    | 1                          | End     | 1136                 |
| Name     | OJ990325_03.9A14.C43.o1.gs | Method  | GENSCAN              |
| Start    | 241                        | End     | 1101                 |
| GI       | none                       | Score   | .79                  |
| Exons    | 241..353, 957..1101        |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22616                      | Seq. ID | OJ990325_03.9A14.C44 |
| Gene No. | 47068                      | Strand  | +                    |
| Start    | 338                        | End     | 975                  |
| Name     | OJ990325_03.9A14.C44.o1.gs | Method  | GENSCAN              |
| Start    | 338                        | End     | 975                  |
| GI       | none                       | Score   | .58                  |
| Exons    | 338..454, 850..975         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22616  | Seq. ID | OJ990325_03.9A14.C44 |
| Gene No.    | 47069  | Strand  | -                    |
| Start       | 1  | End     | 2066                 |
| Name        | OJ990325_03.9A14.C44.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 2066                 |
| GI          | 6594674  | Score   | 265                  |
| Exons       | 1..173, 1841..2066   |         |                      |
| GI Descrip. | (AF118133) chloroplast outer envelope hexokinase 1 [Nicotiana tabacum] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22616                      | Seq. ID | OJ990325_03.9A14.C44 |
| Gene No. | 47069                      | Strand  | -                    |
| Start    | 1                          | End     | 2066                 |
| Name     | OJ990325_03.9A14.C44.o2.gs | Method  | GENSCAN              |
| Start    | 1653                       | End     | 2046                 |
| GI       | none                       | Score   | 1                    |
| Exons    | 1653..1716, 1841..2046     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22617                      | Seq. ID | OJ990325_03.9A14.C45 |
| Gene No. | 47070                      | Strand  | +                    |
| Start    | 699                        | End     | 836                  |
| Name     | OJ990325_03.9A14.C45.o1.gs | Method  | GENSCAN              |
| Start    | 699                        | End     | 836                  |
| GI       | none                       | Score   | .4                   |
| Exons    | 699..836                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22618                      | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No. | 47071                      | Strand  | +                    |
| Start    | 218                        | End     | 471                  |
| Name     | OJ990325_03.9A14.C46.o1.gs | Method  | GENSCAN              |
| Start    | 218                        | End     | 471                  |
| GI       | none                       | Score   | .64                  |
| Exons    | 218..366, 462..471         |         |                      |



|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22618                              | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No. | 47072                              | Strand  | +                    |
| Start    | 4687                               | End     | 5566                 |
| Name     | OJ990325_03.9A14.C46.o3.gs         | Method  | GENSCAN              |
| Start    | 4687                               | End     | 5566                 |
| GI       | none                               | Score   | .88                  |
| Exons    | 4687..4814, 5224..5406, 5491..5566 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22618  | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No. | 47073  | Strand  | +                    |
| Start    | 9405   | End     | 15721                |
| Name     | OJ990325_03.9A14.C46.o4.gs   | Method  | GENSCAN              |
| Start    | 9405   | End     | 12719                |
| GI       | none   | Score   | .87                  |
| Exons    | 9405..9407, 10091..10127, 10495..10641, 10938..10974, 11756..11864, 11910..12719 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22618  | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No.    | 47073  | Strand  | +                    |
| Start       | 9405   | End     | 15721                |
| Name        | OJ990325_03.9A14.C46.o1.np                     | Method  | AAT/NAP              |
| Start       | 11550  | End     | 15721                |
| GI          | 6907089  | Score   | 900                  |
| Exons       | 11550..12627, 15701..15721                     |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22618                      | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No. | 47074                      | Strand  | -                    |
| Start    | 11234                      | End     | 16632                |
| Name     | OJ990325_03.9A14.C46.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 2318                       | End     | 2464                 |
| GI       | none                       | Score   | 163                  |
| Exons    | 2318..2464, 2322..2459     |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22618   | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No.    | 47074   | Strand  | -                    |
| Start       | 11234   | End     | 16632                |
| Name        | OJ990325_03.9A14.C46.o2.np  | Method  | AAT/NAP              |
| Start       | 11234   | End     | 16632                |
| GI          | 6498441   | Score   | 3525                 |
| Exons       | 11234..11319, 12618..13974, 14164..14805, 14980..15114, 15298..15670, 15734..16184, 16514..16632  |         |                      |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22618                      | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No. | 47074                      | Strand  | -                    |
| Start    | 11234                      | End     | 16632                |
| Name     | OJ990325_03.9A14.C46.o3.tw | Method  | TBLASTX:Wheat        |
| Start    | 12814                      | End     | 13195                |
| GI       | none                       | Score   | 198                  |
| Exons    | 12814..13194, 12827..13195 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22618 | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No. | 47074 | Strand  | -                    |
| Start    | 11234 | End     | 16632                |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990325_03.9A14.C46.o5.gs   | Method  | GENSCAN              |
| Start       | 12886  | End     | 16380                |
| GI          | none   | Score   | .4                   |
| Exons       | 12886..13046, 13239..13580, 13704..14543, 14801..15407, 15452..15590, 15714..16266, 16293..16380 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22618  | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No.    | 47074  | Strand  | -                    |
| Start       | 11234  | End     | 16632                |
| Name        | OJ990325_03.9A14.C46.o3.tm   | Method  | TBLASTX:Maize        |
| Start       | 12998  | End     | 13332                |
| GI          | none   | Score   | 186                  |
| Exons       | 12998..13138, 12999..13190, 13009..13332, 13022..13219   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22618  | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No.    | 47074  | Strand  | -                    |
| Start       | 11234  | End     | 16632                |
| Name        | OJ990325_03.9A14.C46.o7.tw   | Method  | TBLASTX:Wheat        |
| Start       | 13498  | End     | 13785                |
| GI          | none   | Score   | 182                  |
| Exons       | 13498..13785   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22618  | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No.    | 47074  | Strand  | -                    |
| Start       | 11234  | End     | 16632                |
| Name        | OJ990325_03.9A14.C46.o2.ts   | Method  | TBLASTX:Soybean      |
| Start       | 13603  | End     | 14169                |
| GI          | 5666795  | Score   | 61                   |
| Exons       | 13603..13785, 13840..13977, 14071..14169   |         |                      |
| GI Descrip. | 4206306 2.0e-10 (AF049110) prpol [Zea mays]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22618  | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No.    | 47074  | Strand  | -                    |
| Start       | 11234  | End     | 16632                |
| Name        | OJ990325_03.9A14.C46.o4.tw   | Method  | TBLASTX:Wheat        |
| Start       | 13840  | End     | 14292                |
| GI          | none   | Score   | 105                  |
| Exons       | 13840..13992, 13841..13981, 14051..14272, 14068..14292   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22618  | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No.    | 47074  | Strand  | -                    |
| Start       | 11234  | End     | 16632                |
| Name        | OJ990325_03.9A14.C46.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 14644  | End     | 15014                |
| GI          | none   | Score   | 231                  |
| Exons       | 14644..14694, 14691..15014   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22618  | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No.    | 47074  | Strand  | -                    |
| Start       | 11234  | End     | 16632                |
| Name        | OJ990325_03.9A14.C46.o1.tw   | Method  | TBLASTX:Wheat        |
| Start       | 14691  | End     | 15092                |
| GI          | none   | Score   | 265                  |
| Exons       | 14691..15092, 14725..15087   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22618  | Seq. ID | OJ990325_03.9A14.C46 |
| Gene No.    | 47074  | Strand  | -                    |

Start 11234  
 Name OJ990325\_03.9A14.C46.o1.tm  
 Start 14766  
 GI none  
 Exons 14766..15149, 14893..15150

End 16632  
 Method TBLASTX:Maize  
 End 15150  
 Score 138

Seq. No. 22618  
 Gene No. 47074  
 Start 11234  
 Name OJ990325\_03.9A14.C46.o6.tw  
 Start 15093  
 GI none  
 Exons 15093..15308, 15094..15306

Seq. ID OJ990325\_03.9A14.C46  
 Strand -  
 End 16632  
 Method TBLASTX:Wheat  
 End 15308  
 Score 133

Seq. No. 22618  
 Gene No. 47074  
 Start 11234  
 Name OJ990325\_03.9A14.C46.o2.tm  
 Start 15177  
 GI none  
 Exons 15177..15410, 15177..15422, 15187..15411, 15425..15532

Seq. ID OJ990325\_03.9A14.C46  
 Strand -  
 End 16632  
 Method TBLASTX:Maize  
 End 15532  
 Score 92

Seq. No. 22618  
 Gene No. 47074  
 Start 11234  
 Name OJ990325\_03.9A14.C46.o3.ts  
 Start 15258  
 GI none  
 Exons 15258..15428, 15428..15622

Seq. ID OJ990325\_03.9A14.C46  
 Strand -  
 End 16632  
 Method TBLASTX:Soybean  
 End 15622  
 Score 105

Seq. No. 22618  
 Gene No. 47074  
 Start 11234  
 Name OJ990325\_03.9A14.C46.o2.tw  
 Start 15335  
 GI none  
 Exons 15335..15406, 15339..15422, 15408..15500, 15425..15697, 15536..15685, 15585..15689

Seq. ID OJ990325\_03.9A14.C46  
 Strand -  
 End 16632  
 Method TBLASTX:Wheat  
 End 15697  
 Score 34

Seq. No. 22618  
 Gene No. 47074  
 Start 11234  
 Name OJ990325\_03.9A14.C46.o5.tw  
 Start 15770  
 GI none  
 Exons 15770..16261, 15789..16106, 15872..16231, 16128..16262

Seq. ID OJ990325\_03.9A14.C46  
 Strand -  
 End 16632  
 Method TBLASTX:Wheat  
 End 16262  
 Score 148

Seq. No. 22619  
 Gene No. 47075  
 Start 5336  
 Name OJ990325\_03.9A14.C47.o1.ts  
 Start 5330  
 GI none  
 Exons 5330..5431, 5336..5443, 5453..5893, 5508..5894, 5945..6034, 5973..5996, 6023..6253, 6030..6254

Seq. ID OJ990325\_03.9A14.C47  
 Strand -  
 End 7142  
 Method TBLASTX:Soybean  
 End 6254  
 Score 58

Seq. No. 22619

Seq. ID OJ990325\_03.9A14.C47

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 47075                                  | Strand | -       |
| Start       | 5336                                   | End    | 7142    |
| Name        | OJ990325_03.9A14.C47.ol.np             | Method | AAT/NAP |
| Start       | 5336                                   | End    | 7142    |
| GI          | 854361                                 | Score  | 1540    |
| Exons       | 5336..6262, 7068..7142                 |        |         |
| GI Descrip. | (X58877) beta-glucanase [Oryza sativa] |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22619  | Seq. ID | OJ990325_03.9A14.C47 |
| Gene No. | 47075  | Strand  | -                    |
| Start    | 5336   | End     | 7142                 |
| Name     | OJ990325_03.9A14.C47.ol.tc   | Method  | TBLASTX:Cress        |
| Start    | 5336   | End     | 6262                 |
| GI       | none   | Score   | 158                  |
| Exons    | 5336..5449, 5450..5893, 5451..5846, 5883..6008, 5900..6007, 6014..6262 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22619                      | Seq. ID | OJ990325_03.9A14.C47 |
| Gene No. | 47075                      | Strand  | -                    |
| Start    | 5336                       | End     | 7142                 |
| Name     | OJ990325_03.9A14.C47.ol.tm | Method  | TBLASTX:Maize        |
| Start    | 5339                       | End     | 5713                 |
| GI       | none                       | Score   | 463                  |
| Exons    | 5339..5713, 5340..5699     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22619                      | Seq. ID | OJ990325_03.9A14.C47 |
| Gene No. | 47075                      | Strand  | -                    |
| Start    | 5336                       | End     | 7142                 |
| Name     | OJ990325_03.9A14.C47.ol.tw | Method  | TBLASTX:Wheat        |
| Start    | 5402                       | End     | 5612                 |
| GI       | none                       | Score   | 159                  |
| Exons    | 5402..5611, 5403..5612     |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22619   | Seq. ID | OJ990325_03.9A14.C47 |
| Gene No.    | 47075   | Strand  | -                    |
| Start       | 5336  | End     | 7142                 |
| Name        | OJ990325_03.9A14.C47.ol.gp  | Method  | AAT/GAP              |
| Start       | 5491  | End     | 5955                 |
| GI          | 18617_1.R1084   | Score   | 898                  |
| Exons       | 5491..5955  |         |                      |
| GI Descrip. | '854361/emb CAA41685.1  2.0e-78 (X58877) beta-glucanase [Oryza sativa]' |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22619                              | Seq. ID | OJ990325_03.9A14.C47 |
| Gene No. | 47075                              | Strand  | -                    |
| Start    | 5336                               | End     | 7142                 |
| Name     | OJ990325_03.9A14.C47.o2.tw         | Method  | TBLASTX:Wheat        |
| Start    | 5870                               | End     | 6226                 |
| GI       | none                               | Score   | 88                   |
| Exons    | 5870..5968, 5871..5969, 5972..6226 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22619                      | Seq. ID | OJ990325_03.9A14.C47 |
| Gene No. | 47075                      | Strand  | -                    |
| Start    | 5336                       | End     | 7142                 |
| Name     | OJ990325_03.9A14.C47.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 6086                       | End     | 6263                 |
| GI       | none                       | Score   | 220                  |

Exons 6086..6262, 6087..6263

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22620                      | Seq. ID | OJ990325_03.9A14.C48 |
| Gene No. | 47076                      | Strand  | +                    |
| Start    | 1339                       | End     | 1586                 |
| Name     | OJ990325_03.9A14.C48.o1.gs | Method  | GENSCAN              |
| Start    | 1339                       | End     | 1586                 |
| GI       | none                       | Score   | .49                  |
| Exons    | 1339..1586                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22621   | Seq. ID | OJ990325_03.9A14.C49 |
| Gene No.    | 47077   | Strand  | -                    |
| Start       | 1   | End     | 741                  |
| Name        | OJ990325_03.9A14.C49.o1.np                        | Method  | AAT/NAP              |
| Start       | 1   | End     | 741                  |
| GI          | 4972067   | Score   | 108                  |
| Exons       | 1..30, 537..741                                   |         |                      |
| GI Descrip. | (AL078467) putative protei [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22621                      | Seq. ID | OJ990325_03.9A14.C49 |
| Gene No. | 47077                      | Strand  | -                    |
| Start    | 1                          | End     | 741                  |
| Name     | OJ990325_03.9A14.C49.o1.gs | Method  | GENSCAN              |
| Start    | 426                        | End     | 701                  |
| GI       | none                       | Score   | .9                   |
| Exons    | 426..701                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22622  | Seq. ID | OJ990325_03.9A14.C50 |
| Gene No.    | 47078  | Strand  | +                    |
| Start       | 1  | End     | 733                  |
| Name        | OJ990325_03.9A14.C50.o1.np                                   | Method  | AAT/NAP              |
| Start       | 1  | End     | 733                  |
| GI          | 2618686  | Score   | 207                  |
| Exons       | 1..135, 487..733   |         |                      |
| GI Descrip. | (AC002510) putative cytokinin oxidase [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22622                      | Seq. ID | OJ990325_03.9A14.C50 |
| Gene No. | 47078                      | Strand  | +                    |
| Start    | 1                          | End     | 733                  |
| Name     | OJ990325_03.9A14.C50.o1.gs | Method  | GENSCAN              |
| Start    | 410                        | End     | 665                  |
| GI       | none                       | Score   | .44                  |
| Exons    | 410..665                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22622                      | Seq. ID | OJ990325_03.9A14.C50 |
| Gene No. | 47078                      | Strand  | +                    |
| Start    | 1                          | End     | 733                  |
| Name     | OJ990325_03.9A14.C50.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 472                        | End     | 675                  |
| GI       | none                       | Score   | 238                  |
| Exons    | 472..675, 473..670         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22622                      | Seq. ID | OJ990325_03.9A14.C50 |
| Gene No. | 47078                      | Strand  | +                    |
| Start    | 1                          | End     | 733                  |
| Name     | OJ990325_03.9A14.C50.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 497                        | End     | 733                  |

|          |  |         |                      |
|----------|--|---------|----------------------|
| GI       | none                                   | Score   | 57                   |
| Exons    | 497..556, 551..733, 559..720, 605..730 |         |                      |
| Seq. No. | 22623                                  | Seq. ID | OJ990325_03.9A14.C51 |
| Gene No. | 47079                                  | Strand  | -                    |
| Start    | 156                                    | End     | 336                  |
| Name     | OJ990325_03.9A14.C51.o1.gs             | Method  | GENSCAN              |
| Start    | 156                                    | End     | 336                  |
| GI       | none                                   | Score   | .6                   |
| Exons    | 156..336                               |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22624   | Seq. ID | OJ990325_03.9A14.C52 |
| Gene No.    | 47080   | Strand  | -                    |
| Start       | 1   | End     | 2306                 |
| Name        | OJ990325_03.9A14.C52.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1470                 |
| GI          | 6498441   | Score   | 1178                 |
| Exons       | 1..76, 406..1470  |         |                      |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22624  | Seq. ID | OJ990325_03.9A14.C52 |
| Gene No.    | 47080  | Strand  | -                    |
| Start       | 1  | End     | 2306                 |
| Name        | OJ990325_03.9A14.C52.o2.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 2306                 |
| GI          | 5042454  | Score   | 1175                 |
| Exons       | 1..21, 568..2001, 2074..2306                   |         |                      |
| GI Descrip. | (AC007789) putative polyprotein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22624                      | Seq. ID | OJ990325_03.9A14.C52 |
| Gene No. | 47080                      | Strand  | -                    |
| Start    | 1                          | End     | 2306                 |
| Name     | OJ990325_03.9A14.C52.o1.gs | Method  | GENSCAN              |
| Start    | 369                        | End     | 1907                 |
| GI       | none                       | Score   | 1                    |
| Exons    | 369..716, 807..1907        |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22624                      | Seq. ID | OJ990325_03.9A14.C52 |
| Gene No. | 47080                      | Strand  | -                    |
| Start    | 1                          | End     | 2306                 |
| Name     | OJ990325_03.9A14.C52.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 933                        | End     | 1307                 |
| GI       | none                       | Score   | 102                  |
| Exons    | 933..1307, 1009..1185      |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22625   | Seq. ID | OJ990325_03.9A14.C53 |
| Gene No.    | 47081   | Strand  | +                    |
| Start       | 1   | End     | 604                  |
| Name        | OJ990325_03.9A14.C53.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 604                  |
| GI          | 6498441   | Score   | 589                  |
| Exons       | 1..604  |         |                      |
| GI Descrip. | (AP000815) EST C72786(E2258) corresponds to a region of the predicted gene.; Similar to Sorghum bicolor Gypsy-Ty3 type retrotransposon RetroSor1. (AF098806) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22625                      | Seq. ID | OJ990325_03.9A14.C53 |
| Gene No. | 47081                      | Strand  | +                    |
| Start    | 1                          | End     | 604                  |
| Name     | OJ990325_03.9A14.C53.ol.gs | Method  | GENSCAN              |
| Start    | 106                        | End     | 302                  |
| GI       | none                       | Score   | .63                  |
| Exons    | 106..302                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22625                      | Seq. ID | OJ990325_03.9A14.C53 |
| Gene No. | 47081                      | Strand  | +                    |
| Start    | 1                          | End     | 604                  |
| Name     | OJ990325_03.9A14.C53.ol.tw | Method  | TBLASTX:Wheat        |
| Start    | 175                        | End     | 462                  |
| GI       | none                       | Score   | 182                  |
| Exons    | 175..462                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22626  | Seq. ID | OJ990325_03.9A14.C54 |
| Gene No.    | 47082  | Strand  | -                    |
| Start       | 199  | End     | 1114                 |
| Name        | OJ990325_03.9A14.C54.ol.np                             | Method  | AAT/NAP              |
| Start       | 199  | End     | 1114                 |
| GI          | 2618687  | Score   | 329                  |
| Exons       | 199..438, 588..812, 1016..1114                         |         |                      |
| GI Descrip. | (AC002510) hypothetical protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22626  | Seq. ID | OJ990325_03.9A14.C54 |
| Gene No. | 47082  | Strand  | -                    |
| Start    | 199  | End     | 1114                 |
| Name     | OJ990325_03.9A14.C54.ol.tm                       | Method  | TBLASTX:Maize        |
| Start    | 209  | End     | 656                  |
| GI       | none   | Score   | 209                  |
| Exons    | 209..421, 214..441, 406..441, 584..655, 588..656 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22626                      | Seq. ID | OJ990325_03.9A14.C54 |
| Gene No. | 47082                      | Strand  | -                    |
| Start    | 199                        | End     | 1114                 |
| Name     | OJ990325_03.9A14.C54.ol.gs | Method  | GENSCAN              |
| Start    | 215                        | End     | 794                  |
| GI       | none                       | Score   | .68                  |
| Exons    | 215..438, 588..794         |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22626                        | Seq. ID | OJ990325_03.9A14.C54 |
| Gene No. | 47082                        | Strand  | -                    |
| Start    | 199                          | End     | 1114                 |
| Name     | OJ990325_03.9A14.C54.ol.tc   | Method  | TBLASTX:Cress        |
| Start    | 588                          | End     | 826                  |
| GI       | none                         | Score   | 137                  |
| Exons    | 588..794, 607..765, 629..826 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22627                      | Seq. ID | OJ990325_03.9A14.C55 |
| Gene No. | 47083                      | Strand  | +                    |
| Start    | 63                         | End     | 267                  |
| Name     | OJ990325_03.9A14.C55.ol.gp | Method  | AAT/GAP              |
| Start    | 63                         | End     | 267                  |
| GI       | none                       | Score   | 384                  |
| Exons    | 63..267                    |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22627   | Seq. ID | OJ990325_03.9A14.C55 |
| Gene No.    | 47084   | Strand  | -                    |
| Start       | 258   | End     | 443                  |
| Name        | OJ990325_03.9A14.C55.o1.np                        | Method  | AAT/NAP              |
| Start       | 258   | End     | 443                  |
| GI          | 4580463   | Score   | 107                  |
| Exons       | 258..443  |         |                      |
| GI Descrip. | (AC006081) unknown protein [Arabidopsis thaliana] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22628   | Seq. ID | OJ990325_03.9A14.C56 |
| Gene No.    | 47085   | Strand  | +                    |
| Start       | 1   | End     | 1447                 |
| Name        | OJ990325_03.9A14.C56.o1.np                              | Method  | AAT/NAP              |
| Start       | 1   | End     | 1447                 |
| GI          | 4680183   | Score   | 189                  |
| Exons       | 1..246, 678..746, 1356..1447                            |         |                      |
| GI Descrip. | (AF111709) gag-pol protein [Oryza sativa subsp. indica] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22628  | Seq. ID | OJ990325_03.9A14.C56 |
| Gene No. | 47086  | Strand  | -                    |
| Start    | 703  | End     | 2658                 |
| Name     | OJ990325_03.9A14.C56.o1.gs                   | Method  | GENSCAN              |
| Start    | 703  | End     | 2658                 |
| GI       | none   | Score   | .68                  |
| Exons    | 703..743, 1808..1876, 2150..2271, 2513..2658 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22629  | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No.    | 47087  | Strand  | +                    |
| Start       | 1  | End     | 4045                 |
| Name        | OJ990325_03.9A14.C57.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 4045                 |
| GI          | 2130141  | Score   | 674                  |
| Exons       | 1..49, 586..1043, 1146..2160, 4002..4045   |         |                      |
| GI Descrip. | mudrA protein - maize transposon MuDR gi 540581 (M76978) mudrA [Zea mays] gi 595816 (U14597) mudrA gene product [Zea mays] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22629                      | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No. | 47087                      | Strand  | +                    |
| Start    | 1                          | End     | 4045                 |
| Name     | OJ990325_03.9A14.C57.o1.gp | Method  | AAT/GAP              |
| Start    | 2300                       | End     | 2586                 |
| GI       | 3107569                    | Score   | 544                  |
| Exons    | 2300..2586                 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22629  | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No.    | 47088  | Strand  | +                    |
| Start       | 6131   | End     | 7475                 |
| Name        | OJ990325_03.9A14.C57.o3.np   | Method  | AAT/NAP              |
| Start       | 6131   | End     | 7475                 |
| GI          | 6630699  | Score   | 94                   |
| Exons       | 6131..6154, 7390..7475   |         |                      |
| GI Descrip. | (AP000969) hypothetical protein [Oryza sativa] gi 6721536 dbj BAA89566.1  (AP001073) hypothetical protein [Oryza sativa] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22629 | Seq. ID | OJ990325_03.9A14.C57 |
|----------|-------|---------|----------------------|



|          |  |        |         |
|----------|--|--------|---------|
| Gene No. | 47089                                    | Strand | +       |
| Start    | 14837                                    | End    | 16525   |
| Name     | OJ990325_03.9A14.C57.o3.gs               | Method | GENSCAN |
| Start    | 14837                                    | End    | 16525   |
| GI       | none                                     | Score  | .44     |
| Exons    | 14837..14879, 16055..16242, 16457..16525 |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22629  | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No. | 47090  | Strand  | -                    |
| Start    | 2069   | End     | 5489                 |
| Name     | OJ990325_03.9A14.C57.o1.gs   | Method  | GENSCAN              |
| Start    | 2069   | End     | 5489                 |
| GI       | none   | Score   | .73                  |
| Exons    | 2069..2267, 2582..2729, 2800..2937, 4267..4453, 4707..4924, 5330..5489 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22629  | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No.    | 47090  | Strand  | -                    |
| Start       | 2069   | End     | 5489                 |
| Name        | OJ990325_03.9A14.C57.o2.np                                 | Method  | AAT/NAP              |
| Start       | 2443   | End     | 5078                 |
| GI          | 6735298  | Score   | 604                  |
| Exons       | 2443..2729, 2800..2979, 3642..3845, 4249..4453, 4707..5078 |         |                      |
| GI Descrip. | (AL137080) putative protein [Arabidopsis thaliana]         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22629  | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No. | 47091  | Strand  | -                    |
| Start    | 7614   | End     | 9336                 |
| Name     | OJ990325_03.9A14.C57.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 1162   | End     | 1538                 |
| GI       | none   | Score   | 146                  |
| Exons    | 1162..1290, 1166..1297, 1205..1294, 1386..1430, 1391..1534, 1392..1538 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22629  | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No. | 47091  | Strand  | -                    |
| Start    | 7614   | End     | 9336                 |
| Name     | OJ990325_03.9A14.C57.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1590   | End     | 2174                 |
| GI       | none   | Score   | 235                  |
| Exons    | 1590..1847, 1595..1825, 1611..1841, 1863..1919, 1971..2174, 1982..2173 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22629                      | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No. | 47091                      | Strand  | -                    |
| Start    | 7614                       | End     | 9336                 |
| Name     | OJ990325_03.9A14.C57.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 2458                       | End     | 2730                 |
| GI       | none                       | Score   | 237                  |
| Exons    | 2458..2730                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22629                      | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No. | 47091                      | Strand  | -                    |
| Start    | 7614                       | End     | 9336                 |
| Name     | OJ990325_03.9A14.C57.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 3640                       | End     | 4397                 |
| GI       | none                       | Score   | 179                  |

Exons 3640..3843, 3647..3841, 4230..4397, 4254..4394, 4280..4396

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22629                              | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No. | 47091                              | Strand  | -                    |
| Start    | 7614                               | End     | 9336                 |
| Name     | OJ990325_03.9A14.C57.o1.tc         | Method  | TBLASTX:Cress        |
| Start    | 4364                               | End     | 4925                 |
| GI       | none                               | Score   | 76                   |
| Exons    | 4364..4456, 4707..4907, 4707..4925 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22629  | Seq. ID | OJ990325_03.9A14.C57 |
| Gene No.    | 47091  | Strand  | -                    |
| Start       | 7614   | End     | 9336                 |
| Name        | OJ990325_03.9A14.C57.o4.np   | Method  | AAT/NAP              |
| Start       | 7614   | End     | 9336                 |
| GI          | 5922619  | Score   | 117                  |
| Exons       | 7614..7721, 9198..9336   |         |                      |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6016852 dbj BAA85195.1  (AP000570) hypothetical protein<br>[Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22630                      | Seq. ID | OJ990325_03.9A14.C58 |
| Gene No. | 47092                      | Strand  | -                    |
| Start    | 1400                       | End     | 1660                 |
| Name     | OJ990325_03.9A14.C58.o1.gs | Method  | GENSCAN              |
| Start    | 1400                       | End     | 1660                 |
| GI       | none                       | Score   | .58                  |
| Exons    | 1400..1660                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22631                      | Seq. ID | OJ990325_03.9A14.C60 |
| Gene No. | 47093                      | Strand  | +                    |
| Start    | 266                        | End     | 429                  |
| Name     | OJ990325_03.9A14.C60.o1.gs | Method  | GENSCAN              |
| Start    | 266                        | End     | 429                  |
| GI       | none                       | Score   | .95                  |
| Exons    | 266..429                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22632                      | Seq. ID | OJ990325_03.9A14.C63 |
| Gene No. | 47094                      | Strand  | -                    |
| Start    | 779                        | End     | 863                  |
| Name     | OJ990325_03.9A14.C63.o1.gs | Method  | GENSCAN              |
| Start    | 779                        | End     | 863                  |
| GI       | none                       | Score   | .95                  |
| Exons    | 779..863                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22633                      | Seq. ID | OJ990325_03.9A14.C64 |
| Gene No. | 47095                      | Strand  | +                    |
| Start    | 340                        | End     | 410                  |
| Name     | OJ990325_03.9A14.C64.o1.gs | Method  | GENSCAN              |
| Start    | 340                        | End     | 410                  |
| GI       | none                       | Score   | .42                  |
| Exons    | 340..410                   |         |                      |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22634                     | Seq. ID | OJ990405_06.9A01.C1 |
| Gene No. | 47096                     | Strand  | -                   |
| Start    | 624                       | End     | 959                 |
| Name     | OJ990405_06.9A01.C1.o1.gs | Method  | GENSCAN             |

Start 624  
GI none  
Exons 624..947

End 947  
Score .51

Seq. No. 22634  
Gene No. 47096  
Start 624  
Name OJ990405\_06.9A01.C1.o1.tm  
Start 702  
GI none  
Exons 702..959, 711..923, 715..945

Seq. ID OJ990405\_06.9A01.C1  
Strand -  
End 959  
Method TBLASTX:Maize  
End 959  
Score 184

Seq. No. 22635  
Gene No. 47097  
Start 8609  
Name OJ990405\_06.9A01.C2.o2.gs  
Start 8609  
GI none  
Exons 8609..9268, 9356..9815

Seq. ID OJ990405\_06.9A01.C2  
Strand +  
End 9815  
Method GENSCAN  
End 9815  
Score .75

Seq. No. 22635  
Gene No. 47098  
Start 8  
Name OJ990405\_06.9A01.C2.o1.gp  
Start 8  
GI 342 1.R1084  
Exons 8..3993

Seq. ID OJ990405\_06.9A01.C2  
Strand -  
End 8125  
Method AAT/GAP  
End 3993  
Score 6192

GI Descrip. '4574406/gb|AAD24042.1| 0.0e+00 (AF121139) RIM2 protein [Oryza sativa].'

Seq. No. 22635  
Gene No. 47098  
Start 8  
Name OJ990405\_06.9A01.C2.o1.gs  
Start 668  
GI none  
Exons 668..1064, 1242..1760, 1871..2261, 2393..3777, 4426..4529, 4795..5055, 7351..7421, 7693..8125

Seq. ID OJ990405\_06.9A01.C2  
Strand -  
End 8125  
Method GENSCAN  
End 8125  
Score .56

Seq. No. 22635  
Gene No. 47098  
Start 8  
Name OJ990405\_06.9A01.C2.o1.np  
Start 689  
GI 4680203  
Exons 689..1666, 1942..2172, 2326..3997  
GI Descrip. (AF114171) TNP2-like protein [Sorghum bicolor]

Seq. ID OJ990405\_06.9A01.C2  
Strand -  
End 8125  
Method AAT/NAP  
End 3997  
Score 3116

Seq. No. 22635  
Gene No. 47098  
Start 8  
Name OJ990405\_06.9A01.C2.o1.tw  
Start 749  
GI none  
Exons 749..835, 824..904, 852..905, 909..989, 911..1027, 918..1058, 929..1057, 1005..1100, 1037..1096, 1103..1144, 1103..1147, 1142..1594, 1158..1394, 1175..1474, 1431..1748, 1623..1739,

Seq. ID OJ990405\_06.9A01.C2  
Strand -  
End 8125  
Method TBLASTX:Wheat  
End 2064  
Score 64

1634..1747, 1716..2057, 1744..2058, 1745..2059, 1879..2064,  
1959..2060

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22635  | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No. | 47098  | Strand  | -                   |
| Start    | 8  | End     | 8125                |
| Name     | OJ990405_06.9A01.C2.o2.tc                                  | Method  | TBLASTX:Cress       |
| Start    | 1325   | End     | 1748                |
| GI       | none   | Score   | 102                 |
| Exons    | 1325..1474, 1325..1594, 1431..1748, 1629..1745, 1634..1747 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22635                              | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No. | 47098                              | Strand  | -                   |
| Start    | 8                                  | End     | 8125                |
| Name     | OJ990405_06.9A01.C2.o2.tm          | Method  | TBLASTX:Maize       |
| Start    | 1703                               | End     | 2016                |
| GI       | none                               | Score   | 119                 |
| Exons    | 1703..1747, 1744..2016, 1745..2002 |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22635   | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No. | 47098   | Strand  | -                   |
| Start    | 8   | End     | 8125                |
| Name     | OJ990405_06.9A01.C2.o3.tw   | Method  | TBLASTX:Wheat       |
| Start    | 2065  | End     | 2468                |
| GI       | none  | Score   | 152                 |
| Exons    | 2065..2145, 2178..2375, 2179..2364, 2179..2376, 2219..2374,<br>2358..2420, 2406..2468, 2419..2466 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22635                     | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No. | 47098                     | Strand  | -                   |
| Start    | 8                         | End     | 8125                |
| Name     | OJ990405_06.9A01.C2.o2.ts | Method  | TBLASTX:Soybean     |
| Start    | 2502                      | End     | 2744                |
| GI       | none                      | Score   | 210                 |
| Exons    | 2502..2744                |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22635                              | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No. | 47098                              | Strand  | -                   |
| Start    | 8                                  | End     | 8125                |
| Name     | OJ990405_06.9A01.C2.o1.tm          | Method  | TBLASTX:Maize       |
| Start    | 2574                               | End     | 3032                |
| GI       | none                               | Score   | 91                  |
| Exons    | 2574..2768, 2778..3032, 2778..3020 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22635  | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No. | 47098  | Strand  | -                   |
| Start    | 8  | End     | 8125                |
| Name     | OJ990405_06.9A01.C2.o2.tw  | Method  | TBLASTX:Wheat       |
| Start    | 2608   | End     | 3077                |
| GI       | none   | Score   | 164                 |
| Exons    | 2608..2844, 2608..2817, 2613..2837, 2815..2910, 2815..2907,<br>2817..2912, 2817..2915, 2919..3023, 2923..3024, 3021..3077,<br>3025..3069 |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22635 | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No. | 47098 | Strand  | -                   |
| Start    | 8     | End     | 8125                |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Name        | OJ990405_06.9A01.C2.o1.tc  | Method  | TBLASTX:Cress       |
| Start       | 2865   | End     | 3213                |
| GI          | none   | Score   | 81                  |
| Exons       | 2865..3206, 2884..2997, 3061..3213   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22635  | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No.    | 47098  | Strand  | -                   |
| Start       | 8  | End     | 8125                |
| Name        | OJ990405_06.9A01.C2.o1.ts  | Method  | TBLASTX:Soybean     |
| Start       | 2946   | End     | 3375                |
| GI          | none   | Score   | 78                  |
| Exons       | 2946..3215, 2959..3210, 3292..3375, 3300..3374   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22635  | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No.    | 47098  | Strand  | -                   |
| Start       | 8  | End     | 8125                |
| Name        | OJ990405_06.9A01.C2.o4.tw  | Method  | TBLASTX:Wheat       |
| Start       | 3291   | End     | 3692                |
| GI          | none   | Score   | 168                 |
| Exons       | 3291..3548, 3296..3538, 3304..3546, 3306..3557, 3307..3549, 3540..3692   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22635  | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No.    | 47098  | Strand  | -                   |
| Start       | 8  | End     | 8125                |
| Name        | OJ990405_06.9A01.C2.o3.tm  | Method  | TBLASTX:Maize       |
| Start       | 4810   | End     | 7422                |
| GI          | none   | Score   | 184                 |
| Exons       | 4810..5067, 4819..5031, 4823..5053, 6310..6393, 6719..6805, 6735..6848, 6736..6813, 6789..6890, 6808..6888, 6824..6892, 6825..6896, 6877..6987, 6879..7007, 6879..7007, 6880..7026, 7035..7103, 7058..7117, 7069..7092, 7345..7407, 7351..7422 |         |                     |
|             |  |         |                     |
| Seq. No.    | 22635  | Seq. ID | OJ990405_06.9A01.C2 |
| Gene No.    | 47099  | Strand  | -                   |
| Start       | 8951   | End     | 9249                |
| Name        | OJ990405_06.9A01.C2.o4.tm  | Method  | TBLASTX:Maize       |
| Start       | 8951   | End     | 9249                |
| GI          | none   | Score   | 203                 |
| Exons       | 8951..9247, 8951..9151, 9187..9249   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No.    | 47100  | Strand  | +                   |
| Start       | 1  | End     | 3546                |
| Name        | OJ990405_06.9A01.C3.o1.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 3546                |
| GI          | 4512618  | Score   | 1851                |
| Exons       | 1..1100, 1308..2958, 3393..3546  |         |                     |
| GI Descrip. | (AC004793) Strong similarity to gi 3600044 T12H20.12 protease homolog from Arabidopsis thaliana BAC gb AF080119 and is a member of the reverse transcriptase family PF 00078.  |         |                     |
|             |  |         |                     |
| Seq. No.    | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No.    | 47100  | Strand  | +                   |
| Start       | 1  | End     | 3546                |
| Name        | OJ990405_06.9A01.C3.o1.gs  | Method  | GENSCAN             |
| Start       | 161  | End     | 2986                |

GI none Score .75  
Exons 161..841, 914..2371, 2519..2986

Seq. No. 22636 Seq. ID OJ990405\_06.9A01.C3  
Gene No. 47101 Strand -  
Start 3118 End 9560  
Name OJ990405\_06.9A01.C3.o3.tc Method TBLASTX:Cress  
Start 2 End 295  
GI none Score 165  
Exons 2..205, 209..295

Seq. No. 22636 Seq. ID OJ990405\_06.9A01.C3  
Gene No. 47101 Strand -  
Start 3118 End 9560  
Name OJ990405\_06.9A01.C3.o5.tw Method TBLASTX:Wheat  
Start 179 End 8210  
GI none Score 129  
Exons 179..508, 7971..8210, 7972..8106

Seq. No. 22636 Seq. ID OJ990405\_06.9A01.C3  
Gene No. 47101 Strand -  
Start 3118 End 9560  
Name OJ990405\_06.9A01.C3.o3.tm Method TBLASTX:Maize  
Start 218 End 8198  
GI none Score 72  
Exons 218..286, 299..853, 352..603, 674..865, 7629..7781, 7776..8198,  
7777..8136

Seq. No. 22636 Seq. ID OJ990405\_06.9A01.C3  
Gene No. 47101 Strand -  
Start 3118 End 9560  
Name OJ990405\_06.9A01.C3.o3.ts Method TBLASTX:Soybean  
Start 395 End 8090  
GI none Score 266  
Exons 395..841, 7629..7757, 7779..8090, 7786..8064

Seq. No. 22636 Seq. ID OJ990405\_06.9A01.C3  
Gene No. 47101 Strand -  
Start 3118 End 9560  
Name OJ990405\_06.9A01.C3.o1.tc Method TBLASTX:Cress  
Start 434 End 8072  
GI none Score 364  
Exons 434..871, 655..702, 751..903, 7630..7767, 7635..7766,  
7782..8072, 7899..7994, 7987..8064

Seq. No. 22636 Seq. ID OJ990405\_06.9A01.C3  
Gene No. 47101 Strand -  
Start 3118 End 9560  
Name OJ990405\_06.9A01.C3.o2.tw Method TBLASTX:Wheat  
Start 521 End 7970  
GI none Score 348  
Exons 521..895, 523..804, 678..839, 7635..7760, 7782..7970

Seq. No. 22636 Seq. ID OJ990405\_06.9A01.C3  
Gene No. 47101 Strand -  
Start 3118 End 9560  
Name OJ990405\_06.9A01.C3.o1.ts Method TBLASTX:Soybean

|       |  |       |      |
|-------|--|-------|------|
| Start | 1436   | End   | 7307 |
| GI    | 5509260  | Score | 425  |
| Exons | 1436..1936, 1453..1707, 1759..1914, 6694..6951, 6699..6890, 6722..6892, 6951..7235, 6997..7218, 7005..7244, 7257..7307, 7257..7307 |       |      |

GI Descrip. -

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No. | 47101  | Strand  | -                   |
| Start    | 3118   | End     | 9560                |
| Name     | OJ990405_06.9A01.C3.o4.tm                                  | Method  | TBLASTX:Maize       |
| Start    | 1480   | End     | 7151                |
| GI       | none   | Score   | 267                 |
| Exons    | 1480..1632, 1481..1726, 1485..1682, 6945..7151, 6948..7088 |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22636                              | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No. | 47101                              | Strand  | -                   |
| Start    | 3118                               | End     | 9560                |
| Name     | OJ990405_06.9A01.C3.o2.tc          | Method  | TBLASTX:Cress       |
| Start    | 1544                               | End     | 7073                |
| GI       | none                               | Score   | 246                 |
| Exons    | 1544..1819, 1544..1789, 6813..7073 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No. | 47101  | Strand  | -                   |
| Start    | 3118   | End     | 9560                |
| Name     | OJ990405_06.9A01.C3.o1.tw  | Method  | TBLASTX:Wheat       |
| Start    | 1601   | End     | 7031                |
| GI       | none   | Score   | 297                 |
| Exons    | 1601..1945, 1657..1941, 1937..2146, 1939..2133, 2144..2263, 6600..6692, 6687..6890, 6739..6876, 6951..7025, 6951..7031 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No. | 47101  | Strand  | -                   |
| Start    | 3118   | End     | 9560                |
| Name     | OJ990405_06.9A01.C3.o2.tm  | Method  | TBLASTX:Maize       |
| Start    | 1732   | End     | 6899                |
| GI       | none   | Score   | 504                 |
| Exons    | 1732..1920, 1733..2179, 1742..2107, 1939..2166, 6459..6899, 6688..6873 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22636                     | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No. | 47101                     | Strand  | -                   |
| Start    | 3118                      | End     | 9560                |
| Name     | OJ990405_06.9A01.C3.o4.tc | Method  | TBLASTX:Cress       |
| Start    | 1991                      | End     | 6647                |
| GI       | none                      | Score   | 202                 |
| Exons    | 1991..2242, 6390..6647    |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No. | 47101  | Strand  | -                   |
| Start    | 3118   | End     | 9560                |
| Name     | OJ990405_06.9A01.C3.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 2279   | End     | 6341                |
| GI       | none   | Score   | 321                 |
| Exons    | 2279..2692, 2545..2676, 2717..2953, 2737..2910, 3041..3076, 5686..6198, 5696..6199, 6199..6333, 6201..6341 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No. | 47101  | Strand  | -                   |
| Start    | 3118   | End     | 9560                |
| Name     | OJ990405_06.9A01.C3.o3.tw  | Method  | TBLASTX:Wheat       |
| Start    | 2285   | End     | 6518                |
| GI       | none   | Score   | 247                 |
| Exons    | 2285..2545, 2344..2463, 6088..6198, 6201..6344, 6205..6333, 6369..6518, 6379..6456 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No. | 47101  | Strand  | -                   |
| Start    | 3118   | End     | 9560                |
| Name     | OJ990405_06.9A01.C3.o2.ts  | Method  | TBLASTX:Soybean     |
| Start    | 2309   | End     | 6323                |
| GI       | none   | Score   | 481                 |
| Exons    | 2309..2905, 2344..2427, 2496..2636, 2521..2667, 2710..2832, 2733..2834, 5656..5916, 5810..5869, 5938..6198, 5978..6136, 6201..6323 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No. | 47101  | Strand  | -                   |
| Start    | 3118   | End     | 9560                |
| Name     | OJ990405_06.9A01.C3.o4.tw                      | Method  | TBLASTX:Wheat       |
| Start    | 2771   | End     | 5869                |
| GI       | none   | Score   | 187                 |
| Exons    | 2771..2947, 2788..2982, 5689..5865, 5738..5869 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No. | 47101  | Strand  | -                   |
| Start    | 3118   | End     | 9560                |
| Name     | OJ990405_06.9A01.C3.o2.gs  | Method  | GENSCAN             |
| Start    | 3118   | End     | 8219                |
| GI       | none   | Score   | .44                 |
| Exons    | 3118..3627, 4251..4386, 5200..5347, 6326..6620, 6981..7754, 7818..8219 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22636  | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No.    | 47101  | Strand  | -                   |
| Start       | 3118   | End     | 9560                |
| Name        | OJ990405_06.9A01.C3.o2.np                      | Method  | AAT/NAP             |
| Start       | 3460   | End     | 4463                |
| GI          | 6539588  | Score   | 215                 |
| Exons       | 3460..3721, 4437..4463                         |         |                     |
| GI Descrip. | (AP000837) hypothetical protein [Oryza sativa] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22636   | Seq. ID | OJ990405_06.9A01.C3 |
| Gene No.    | 47101   | Strand  | -                   |
| Start       | 3118  | End     | 9560                |
| Name        | OJ990405_06.9A01.C3.o3.np   | Method  | AAT/NAP             |
| Start       | 5668  | End     | 9560                |
| GI          | 6630685   | Score   | 2006                |
| Exons       | 5668..7313, 7349..7600, 7631..8219, 9507..9560                              |         |                     |
| GI Descrip. | (AP000969) Similar to copia-type pol polyprotein. (AF105716) [Oryza sativa] |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22637 | Seq. ID | OJ990405_06.9A01.C4 |
|----------|-------|---------|---------------------|



|          |  |        |         |
|----------|--|--------|---------|
| Gene No. | 47102  | Strand | +       |
| Start    | 1440   | End    | 5828    |
| Name     | OJ990405_06.9A01.C4.o1.gs                      | Method | GENSCAN |
| Start    | 1440   | End    | 5471    |
| GI       | none   | Score  | .73     |
| Exons    | 1440..1617, 3297..3452, 3482..3675, 5373..5471 |        |         |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22637                              | Seq. ID | OJ990405_06.9A01.C4 |
| Gene No. | 47102                              | Strand  | +                   |
| Start    | 1440                               | End     | 5828                |
| Name     | OJ990405_06.9A01.C4.o1.gp          | Method  | AAT/GAP             |
| Start    | 3952                               | End     | 5241                |
| GI       | none                               | Score   | 850                 |
| Exons    | 3952..4100, 4772..4877, 4997..5241 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22637                     | Seq. ID | OJ990405_06.9A01.C4 |
| Gene No. | 47102                     | Strand  | +                   |
| Start    | 1440                      | End     | 5828                |
| Name     | OJ990405_06.9A01.C4.o2.gp | Method  | AAT/GAP             |
| Start    | 5370                      | End     | 5828                |
| GI       | 5002888                   | Score   | 597                 |
| Exons    | 5370..5828                |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22637   | Seq. ID | OJ990405_06.9A01.C4 |
| Gene No.    | 47103   | Strand  | +                   |
| Start       | 11199   | End     | 11842               |
| Name        | OJ990405_06.9A01.C4.o2.np   | Method  | AAT/NAP             |
| Start       | 11199   | End     | 11842               |
| GI          | 6069646   | Score   | 192                 |
| Exons       | 11199..11842  |         |                     |
| GI Descrip. | (AP000616) similar to putative reverse transcriptase (AC005315) [Oryza sativa] gi 6907112 dbj BAA90639.1  (AP001129) Similar to Arabidopsis thaliana chromosome II BAC F9013 genomic sequence, putative non-LTR retroelement reverse transcriptase. (AC006248) [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22637  | Seq. ID | OJ990405_06.9A01.C4 |
| Gene No.    | 47104  | Strand  | -                   |
| Start       | 7412   | End     | 8884                |
| Name        | OJ990405_06.9A01.C4.o3.gp  | Method  | AAT/GAP             |
| Start       | 7153   | End     | 7243                |
| GI          | LIB3477-003-P1-K1-E9   | Score   | 107                 |
| Exons       | 7153..7243   |         |                     |
| GI Descrip. | '2498586/sp Q40638 MP01_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY S 1 PRECURSOR (ORY S I) >gi_1173557 (U31771) Ory s 1 [Oryza sativa]' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22637                     | Seq. ID | OJ990405_06.9A01.C4 |
| Gene No. | 47104                     | Strand  | -                   |
| Start    | 7412                      | End     | 8884                |
| Name     | OJ990405_06.9A01.C4.o2.gs | Method  | GENSCAN             |
| Start    | 7412                      | End     | 8884                |
| GI       | none                      | Score   | .42                 |
| Exons    | 7412..7435, 8672..8884    |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22637 | Seq. ID | OJ990405_06.9A01.C4 |
| Gene No. | 47105 | Strand  | -                   |

|             |   |        |         |
|-------------|---|--------|---------|
| Start       | 10172   | End    | 11842   |
| Name        | OJ990405_06.9A01.C4.ol.np                               | Method | AAT/NAP |
| Start       | 10172   | End    | 11842   |
| GI          | 6456469   | Score  | 66      |
| Exons       | 10172..10306, 11789..11842                              |        |         |
| GI Descrip. | (AB025346) oxidosqualene cyclase [Taraxacum officinale] |        |         |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22637  | Seq. ID | OJ990405_06.9A01.C4 |
| Gene No. | 47105  | Strand  | -                   |
| Start    | 10172  | End     | 11842               |
| Name     | OJ990405_06.9A01.C4.ol.tm                              | Method  | TBLASTX:Maize       |
| Start    | 11433  | End     | 11841               |
| GI       | none   | Score   | 64                  |
| Exons    | 11433..11504, 11554..11700, 11556..11684, 11767..11841 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22638  | Seq. ID | OJ990405_06.9A01.C5 |
| Gene No. | 47106  | Strand  | -                   |
| Start    | 493  | End     | 1056                |
| Name     | OJ990405_06.9A01.C5.ol.tm  | Method  | TBLASTX:Maize       |
| Start    | 491  | End     | 742                 |
| GI       | none   | Score   | 120                 |
| Exons    | 491..574, 493..585, 493..579, 617..739, 658..741, 658..741, 659..742 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22638   | Seq. ID | OJ990405_06.9A01.C5 |
| Gene No.    | 47106   | Strand  | -                   |
| Start       | 493   | End     | 1056                |
| Name        | OJ990405_06.9A01.C5.ol.np                             | Method  | AAT/NAP             |
| Start       | 493   | End     | 1056                |
| GI          | 5922599   | Score   | 119                 |
| Exons       | 493..576, 658..738, 1029..1056                        |         |                     |
| GI Descrip. | (AB025353) oxidosqualene cyclase [Allium macrostemon] |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22639   | Seq. ID | OJ990405_06.9A01.C7 |
| Gene No.    | 47107   | Strand  | -                   |
| Start       | 183   | End     | 598                 |
| Name        | OJ990405_06.9A01.C7.ol.np   | Method  | AAT/NAP             |
| Start       | 183   | End     | 598                 |
| GI          | 1196998   | Score   | 692                 |
| Exons       | 183..598  |         |                     |
| GI Descrip. | (J01829) unknown protein [Transposon Tn10]<br>gi 5103202 dbj BAA78838.1  (AP000342) transposase of Tn10<br>[Plasmid R100] gi 5706382 dbj BAA83097.1  (AB026428) transposase<br>[Methylobacterium aminofaciens] gi 5738092 gb AAD50250.1 AF162223_9<br>(AF162223) IS10-right transposase [Shigella flexneri]<br>gi 6721110 gb AAF26764.1 AC007396_13 (AC007396) T4012.21<br>[Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22640                     | Seq. ID | OJ990405_06.9A01.C8 |
| Gene No. | 47108                     | Strand  | -                   |
| Start    | 135                       | End     | 275                 |
| Name     | OJ990405_06.9A01.C8.ol.gs | Method  | GENSCAN             |
| Start    | 135                       | End     | 275                 |
| GI       | none                      | Score   | .74                 |
| Exons    | 135..275                  |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22641 | Seq. ID | OJ990405_06.9A01.C9 |
|----------|-------|---------|---------------------|

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 47109  | Strand  | +                    |
| Start       | 1  | End     | 701                  |
| Name        | OJ990405_06.9A01.C9.o1.np  | Method  | AAT/NAP              |
| Start       | 1  | End     | 701                  |
| GI          | 4416302  | Score   | 651                  |
| Exons       | 1..701   |         |                      |
| GI Descrip. | (AF105716) copia-type pol polyprotein [Zea mays]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22641  | Seq. ID | OJ990405_06.9A01.C9  |
| Gene No.    | 47109  | Strand  | +                    |
| Start       | 1  | End     | 701                  |
| Name        | OJ990405_06.9A01.C9.o1.gs  | Method  | GENSCAN              |
| Start       | 12   | End     | 201                  |
| GI          | none   | Score   | .94                  |
| Exons       | 12..78, 116..201   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22641  | Seq. ID | OJ990405_06.9A01.C9  |
| Gene No.    | 47109  | Strand  | +                    |
| Start       | 1  | End     | 701                  |
| Name        | OJ990405_06.9A01.C9.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 63   | End     | 640                  |
| GI          | none   | Score   | 160                  |
| Exons       | 63..203, 71..205, 205..618, 206..640, 516..635   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22641  | Seq. ID | OJ990405_06.9A01.C9  |
| Gene No.    | 47109  | Strand  | +                    |
| Start       | 1  | End     | 701                  |
| Name        | OJ990405_06.9A01.C9.o1.ts  | Method  | TBLASTX:Soybean      |
| Start       | 81   | End     | 631                  |
| GI          | none   | Score   | 94                   |
| Exons       | 81..203, 206..466, 268..426, 488..631, 535..594  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22642  | Seq. ID | OJ990405_06.9A01.C11 |
| Gene No.    | 47110  | Strand  | +                    |
| Start       | 1  | End     | 422                  |
| Name        | OJ990405_06.9A01.C11.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 419                  |
| GI          | 6691716  | Score   | 439                  |
| Exons       | 1..419   |         |                      |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6691717 dbj BAA89397.1  (AP000570) hypothetical protein<br>[Oryza sativa] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22642  | Seq. ID | OJ990405_06.9A01.C11 |
| Gene No.    | 47110  | Strand  | +                    |
| Start       | 1  | End     | 422                  |
| Name        | OJ990405_06.9A01.C11.o1.gs   | Method  | GENSCAN              |
| Start       | 81   | End     | 422                  |
| GI          | none   | Score   | .97                  |
| Exons       | 81..422  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22643  | Seq. ID | OJ990405_06.9A01.C13 |
| Gene No.    | 47111  | Strand  | -                    |
| Start       | 609  | End     | 643                  |
| Name        | OJ990405_06.9A01.C13.o1.gs   | Method  | GENSCAN              |
| Start       | 609  | End     | 643                  |
| GI          | none   | Score   | .77                  |

Exons 609..643

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22644   | Seq. ID | OJ990405_06.9A01.C14 |
| Gene No.    | 47112   | Strand  | +                    |
| Start       | 1   | End     | 780                  |
| Name        | OJ990405_06.9A01.C14.ol.np                          | Method  | AAT/NAP              |
| Start       | 1   | End     | 780                  |
| GI          | 6045133   | Score   | 170                  |
| Exons       | 1..67, 468..599, 691..780                           |         |                      |
| GI Descrip. | (AB033334) cycloartenol synthase [Luffa cylindrica] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22644                      | Seq. ID | OJ990405_06.9A01.C14 |
| Gene No. | 47112                      | Strand  | +                    |
| Start    | 1                          | End     | 780                  |
| Name     | OJ990405_06.9A01.C14.ol.gs | Method  | GENSCAN              |
| Start    | 2                          | End     | 611                  |
| GI       | none                       | Score   | .68                  |
| Exons    | 2..13, 399..611            |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22644  | Seq. ID | OJ990405_06.9A01.C14 |
| Gene No. | 47112  | Strand  | +                    |
| Start    | 1  | End     | 780                  |
| Name     | OJ990405_06.9A01.C14.ol.tm   | Method  | TBLASTX:Maize        |
| Start    | 417  | End     | 780                  |
| GI       | none   | Score   | 187                  |
| Exons    | 417..602, 420..593, 452..604, 458..613, 690..776, 690..776, 691..780, 691..780 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22644                        | Seq. ID | OJ990405_06.9A01.C14 |
| Gene No. | 47112                        | Strand  | +                    |
| Start    | 1                            | End     | 780                  |
| Name     | OJ990405_06.9A01.C14.ol.tc   | Method  | TBLASTX:Cress        |
| Start    | 455                          | End     | 780                  |
| GI       | none                         | Score   | 137                  |
| Exons    | 455..592, 456..593, 691..780 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22644                        | Seq. ID | OJ990405_06.9A01.C14 |
| Gene No. | 47112                        | Strand  | +                    |
| Start    | 1                            | End     | 780                  |
| Name     | OJ990405_06.9A01.C14.ol.ts   | Method  | TBLASTX:Soybean      |
| Start    | 464                          | End     | 780                  |
| GI       | none                         | Score   | 116                  |
| Exons    | 464..601, 465..590, 691..780 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22645  | Seq. ID | OJ990405_06.9A01.C15 |
| Gene No.    | 47113  | Strand  | -                    |
| Start       | 1  | End     | 549                  |
| Name        | OJ990405_06.9A01.C15.ol.np                       | Method  | AAT/NAP              |
| Start       | 1  | End     | 549                  |
| GI          | 4416302  | Score   | 570                  |
| Exons       | 1..549   |         |                      |
| GI Descrip. | (AF105716) copia-type pol polyprotein [Zea mays] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22645                      | Seq. ID | OJ990405_06.9A01.C15 |
| Gene No. | 47113                      | Strand  | -                    |
| Start    | 1                          | End     | 549                  |
| Name     | OJ990405_06.9A01.C15.ol.tm | Method  | TBLASTX:Maize        |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Start       | 7   | End     | 548                  |
| GI          | none  | Score   | 286                  |
| Exons       | 7..477, 8..478, 480..548  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22645   | Seq. ID | OJ990405_06.9A01.C15 |
| Gene No.    | 47113   | Strand  | -                    |
| Start       | 1   | End     | 549                  |
| Name        | OJ990405_06.9A01.C15.ol.ts  | Method  | TBLASTX:Soybean      |
| Start       | 10  | End     | 477                  |
| GI          | none  | Score   | 36                   |
| Exons       | 10..195, 89..148, 217..477, 257..415  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22645   | Seq. ID | OJ990405_06.9A01.C15 |
| Gene No.    | 47113   | Strand  | -                    |
| Start       | 1   | End     | 549                  |
| Name        | OJ990405_06.9A01.C15.ol.tw  | Method  | TBLASTX:Wheat        |
| Start       | 10  | End     | 465                  |
| GI          | none  | Score   | 112                  |
| Exons       | 10..186, 205..465   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22646   | Seq. ID | OJ990405_06.9A01.C18 |
| Gene No.    | 47114   | Strand  | +                    |
| Start       | 188   | End     | 626                  |
| Name        | OJ990405_06.9A01.C18.ol.tc  | Method  | TBLASTX:Cress        |
| Start       | 185   | End     | 530                  |
| GI          | none  | Score   | 132                  |
| Exons       | 185..265, 191..313, 196..312, 396..530, 413..520  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22646   | Seq. ID | OJ990405_06.9A01.C18 |
| Gene No.    | 47114   | Strand  | +                    |
| Start       | 188   | End     | 626                  |
| Name        | OJ990405_06.9A01.C18.ol.tm  | Method  | TBLASTX:Maize        |
| Start       | 186   | End     | 532                  |
| GI          | none  | Score   | 128                  |
| Exons       | 186..311, 188..313, 190..318, 190..312, 396..530, 396..521, 397..531, 401..532          |         |                      |
|             |   |         |                      |
| Seq. No.    | 22646   | Seq. ID | OJ990405_06.9A01.C18 |
| Gene No.    | 47114   | Strand  | +                    |
| Start       | 188   | End     | 626                  |
| Name        | OJ990405_06.9A01.C18.ol.gp  | Method  | AAT/GAP              |
| Start       | 188   | End     | 531                  |
| GI          | uC-osflcyp065e03b1  | Score   | 398                  |
| Exons       | 188..310, 399..531  |         |                      |
| GI Descrip. | '541855/pir  A49398 4.0e-50 cycloartenol synthase (EC 5.4.99.8) - Arabidopsis thaliana' |         |                      |
|             |   |         |                      |
| Seq. No.    | 22646   | Seq. ID | OJ990405_06.9A01.C18 |
| Gene No.    | 47114   | Strand  | +                    |
| Start       | 188   | End     | 626                  |
| Name        | OJ990405_06.9A01.C18.ol.np  | Method  | AAT/NAP              |
| Start       | 191   | End     | 626                  |
| GI          | 6045135   | Score   | 193                  |
| Exons       | 191..310, 399..626  |         |                      |
| GI Descrip. | (AB033335) oxidosqualene cyclase [Luffa cylindrica]                                     |         |                      |
|             |   |         |                      |
| Seq. No.    | 22646   | Seq. ID | OJ990405_06.9A01.C18 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 47114  | Strand  | +                    |
| Start       | 188  | End     | 626                  |
| Name        | OJ990405_06.9A01.C18.o1.ts                           | Method  | TBLASTX:Soybean      |
| Start       | 197  | End     | 535                  |
| GI          | none   | Score   | 125                  |
| Exons       | 197..316, 396..521, 416..535                         |         |                      |
|             |  |         |                      |
| Seq. No.    | 22647  | Seq. ID | OJ990405_06.9A01.C20 |
| Gene No.    | 47115  | Strand  | -                    |
| Start       | 1  | End     | 349                  |
| Name        | OJ990405_06.9A01.C20.o1.np                           | Method  | AAT/NAP              |
| Start       | 1  | End     | 349                  |
| GI          | 3777527  | Score   | 439                  |
| Exons       | 1..349   |         |                      |
| GI Descrip. | (AF053008) gag-pol polyprotein [Glycine max]         |         |                      |
|             |  |         |                      |
| Seq. No.    | 22647  | Seq. ID | OJ990405_06.9A01.C20 |
| Gene No.    | 47115  | Strand  | -                    |
| Start       | 1  | End     | 349                  |
| Name        | OJ990405_06.9A01.C20.o1.ts                           | Method  | TBLASTX:Soybean      |
| Start       | 2  | End     | 349                  |
| GI          | 5509260  | Score   | 80                   |
| Exons       | 2..64, 3..125, 18..80, 125..349, 171..344, 178..348  |         |                      |
| GI Descrip. | -  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22647  | Seq. ID | OJ990405_06.9A01.C20 |
| Gene No.    | 47115  | Strand  | -                    |
| Start       | 1  | End     | 349                  |
| Name        | OJ990405_06.9A01.C20.o1.tw                           | Method  | TBLASTX:Wheat        |
| Start       | 2  | End     | 334                  |
| GI          | none   | Score   | 42                   |
| Exons       | 2..58, 3..62, 125..283, 171..221, 263..334, 269..334 |         |                      |
|             |  |         |                      |
| Seq. No.    | 22647  | Seq. ID | OJ990405_06.9A01.C20 |
| Gene No.    | 47115  | Strand  | -                    |
| Start       | 1  | End     | 349                  |
| Name        | OJ990405_06.9A01.C20.o1.tm                           | Method  | TBLASTX:Maize        |
| Start       | 26   | End     | 343                  |
| GI          | none   | Score   | 95                   |
| Exons       | 26..343, 171..326                                    |         |                      |
|             |  |         |                      |
| Seq. No.    | 22647  | Seq. ID | OJ990405_06.9A01.C20 |
| Gene No.    | 47115  | Strand  | -                    |
| Start       | 1  | End     | 349                  |
| Name        | OJ990405_06.9A01.C20.o1.gs                           | Method  | GENSCAN              |
| Start       | 155  | End     | 322                  |
| GI          | none   | Score   | .44                  |
| Exons       | 155..322   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22648  | Seq. ID | OJ990405_06.9A01.C21 |
| Gene No.    | 47116  | Strand  | +                    |
| Start       | 227  | End     | 420                  |
| Name        | OJ990405_06.9A01.C21.o1.ts                           | Method  | TBLASTX:Soybean      |
| Start       | 217  | End     | 418                  |
| GI          | none   | Score   | 61                   |
| Exons       | 217..417, 224..418                                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22648                      | Seq. ID | OJ990405_06.9A01.C21 |
| Gene No. | 47116                      | Strand  | +                    |
| Start    | 227                        | End     | 420                  |
| Name     | OJ990405_06.9A01.C21.ol.tc | Method  | TBLASTX:Cress        |
| Start    | 224                        | End     | 418                  |
| GI       | none                       | Score   | 194                  |
| Exons    | 224..418, 251..418         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22648                      | Seq. ID | OJ990405_06.9A01.C21 |
| Gene No. | 47116                      | Strand  | +                    |
| Start    | 227                        | End     | 420                  |
| Name     | OJ990405_06.9A01.C21.ol.tm | Method  | TBLASTX:Maize        |
| Start    | 224                        | End     | 418                  |
| GI       | none                       | Score   | 209                  |
| Exons    | 224..418, 224..418         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22648  | Seq. ID | OJ990405_06.9A01.C21 |
| Gene No.    | 47116  | Strand  | +                    |
| Start       | 227  | End     | 420                  |
| Name        | OJ990405_06.9A01.C21.ol.np                               | Method  | AAT/NAP              |
| Start       | 227  | End     | 420                  |
| GI          | 6090879  | Score   | 140                  |
| Exons       | 227..420   |         |                      |
| GI Descrip. | (AF169966) putative cycloartenol synthase [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22649   | Seq. ID | OJ990405_06.9A01.C22 |
| Gene No.    | 47117   | Strand  | +                    |
| Start       | 1   | End     | 5621                 |
| Name        | OJ990405_06.9A01.C22.ol.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 5621                 |
| GI          | 6045135   | Score   | 642                  |
| Exons       | 1..36, 1591..1713, 1802..1924, 2402..2497, 4006..4065, 4359..4405, 4519..4662, 4763..4940, 5541..5621 |         |                      |
| GI Descrip. | (AB033335) oxidosqualene cyclase [Luffa cylindrica]   |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22649   | Seq. ID | OJ990405_06.9A01.C22 |
| Gene No.    | 47117   | Strand  | +                    |
| Start       | 1   | End     | 5621                 |
| Name        | OJ990405_06.9A01.C22.ol.gp  | Method  | AAT/GAP              |
| Start       | 1606  | End     | 4050                 |
| GI          | uC-osflcyp065e03b1  | Score   | 665                  |
| Exons       | 1606..1713, 1802..1924, 2402..2500, 4009..4050  |         |                      |
| GI Descrip. | '541855/pir  A49398 4.0e-50 cycloartenol synthase (EC 5.4.99.8) - Arabidopsis thaliana' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22649  | Seq. ID | OJ990405_06.9A01.C22 |
| Gene No. | 47117  | Strand  | +                    |
| Start    | 1  | End     | 5621                 |
| Name     | OJ990405_06.9A01.C22.o2.gs   | Method  | GENSCAN              |
| Start    | 1805   | End     | 5621                 |
| GI       | none   | Score   | .66                  |
| Exons    | 1805..1924, 2402..2500, 2923..3033, 3091..3169, 3259..3455, 4009..4065, 4359..4405, 4519..4662, 4763..4940, 5541..5621 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22649 | Seq. ID | OJ990405_06.9A01.C22 |
| Gene No. | 47118 | Strand  | -                    |
| Start    | 131   | End     | 557                  |

|       |                            |        |         |
|-------|----------------------------|--------|---------|
| Name  | OJ990405_06.9A01.C22.o1.gs | Method | GENSCAN |
| Start | 131                        | End    | 557     |
| GI    | none                       | Score  | .52     |
| Exons | 131..331, 477..557         |        |         |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22649  | Seq. ID | OJ990405_06.9A01.C22 |
| Gene No. | 47119  | Strand  |                      |
| Start    | 1589   | End     | 5662                 |
| Name     | OJ990405_06.9A01.C22.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1589   | End     | 5662                 |
| GI       | none   | Score   | 128                  |
| Exons    | 1589..1714, 1591..1716, 1593..1721, 1593..1715, 1799..1933, 1803..1925, 1804..1935, 2409..2495, 2429..2497, 2431..2496, 2432..2497, 3996..4064, 3999..4064, 4000..4068, 4009..4068, 4359..4406, 4361..4405, 4520..4663, 4522..4665, 4757..4918, 4763..4918, 4764..4943, 5538..5621, 5538..5621, 5540..5662 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22649  | Seq. ID | OJ990405_06.9A01.C22 |
| Gene No. | 47119  | Strand  |                      |
| Start    | 1589   | End     | 5662                 |
| Name     | OJ990405_06.9A01.C22.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 1594   | End     | 5621                 |
| GI       | none   | Score   | 132                  |
| Exons    | 1594..1716, 1599..1715, 1799..1933, 1816..1923, 2399..2494, 3991..4068, 4380..4430, 4520..4666, 4547..4663, 4766..4927, 4767..4943, 5538..5621 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22649  | Seq. ID | OJ990405_06.9A01.C22 |
| Gene No. | 47119  | Strand  |                      |
| Start    | 1589   | End     | 5662                 |
| Name     | OJ990405_06.9A01.C22.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1600   | End     | 5624                 |
| GI       | none   | Score   | 105                  |
| Exons    | 1600..1716, 1799..1933, 1837..1923, 2399..2494, 4520..4666, 4525..4665, 4761..4928, 4763..4942, 4767..4943, 5538..5624 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22649                              | Seq. ID | OJ990405_06.9A01.C22 |
| Gene No. | 47119                              | Strand  |                      |
| Start    | 1589                               | End     | 5662                 |
| Name     | OJ990405_06.9A01.C22.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 3237                               | End     | 3512                 |
| GI       | none                               | Score   | 288                  |
| Exons    | 3237..3512, 3237..3440, 3239..3448 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22649                      | Seq. ID | OJ990405_06.9A01.C22 |
| Gene No. | 47119                      | Strand  |                      |
| Start    | 1589                       | End     | 5662                 |
| Name     | OJ990405_06.9A01.C22.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 3306                       | End     | 3707                 |
| GI       | none                       | Score   | 102                  |
| Exons    | 3306..3455, 3537..3707     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22649                      | Seq. ID | OJ990405_06.9A01.C22 |
| Gene No. | 47119                      | Strand  |                      |
| Start    | 1589                       | End     | 5662                 |
| Name     | OJ990405_06.9A01.C22.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 4642                       | End     | 5632                 |



|       |  |       |    |
|-------|--|-------|----|
| GI    | none   | Score | 43 |
| Exons | 4642..4665, 4643..4666, 4763..4939, 4767..4940, 5532..5621, 5576..5632 |       |    |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22650                      | Seq. ID | OJ990405_06.9A01.C23 |
| Gene No. | 47120                      | Strand  | -                    |
| Start    | 864                        | End     | 950                  |
| Name     | OJ990405_06.9A01.C23.ol.gs | Method  | GENSCAN              |
| Start    | 864                        | End     | 950                  |
| GI       | none                       | Score   | .42                  |
| Exons    | 864..950                   |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22651   | Seq. ID | OJ990405_06.9A01.C25 |
| Gene No.    | 47121   | Strand  | -                    |
| Start       | 1   | End     | 255                  |
| Name        | OJ990405_06.9A01.C25.ol.np                              | Method  | AAT/NAP              |
| Start       | 1   | End     | 249                  |
| GI          | 6598481   | Score   | 188                  |
| Exons       | 1..249  |         |                      |
| GI Descrip. | (AC005693) cycloartenol synthase [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22651                      | Seq. ID | OJ990405_06.9A01.C25 |
| Gene No. | 47121                      | Strand  | -                    |
| Start    | 1                          | End     | 255                  |
| Name     | OJ990405_06.9A01.C25.ol.gs | Method  | GENSCAN              |
| Start    | 52                         | End     | 249                  |
| GI       | none                       | Score   | .91                  |
| Exons    | 52..249                    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22651                      | Seq. ID | OJ990405_06.9A01.C25 |
| Gene No. | 47121                      | Strand  | -                    |
| Start    | 1                          | End     | 255                  |
| Name     | OJ990405_06.9A01.C25.ol.tc | Method  | TBLASTX:Cress        |
| Start    | 52                         | End     | 253                  |
| GI       | none                       | Score   | 60                   |
| Exons    | 52..252, 146..253          |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22651                      | Seq. ID | OJ990405_06.9A01.C25 |
| Gene No. | 47121                      | Strand  | -                    |
| Start    | 1                          | End     | 255                  |
| Name     | OJ990405_06.9A01.C25.ol.ts | Method  | TBLASTX:Soybean      |
| Start    | 52                         | End     | 255                  |
| GI       | none                       | Score   | 77                   |
| Exons    | 52..255, 124..255          |         |                      |

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 22651                                | Seq. ID | OJ990405_06.9A01.C25 |
| Gene No. | 47121                                | Strand  | -                    |
| Start    | 1                                    | End     | 255                  |
| Name     | OJ990405_06.9A01.C25.ol.tm           | Method  | TBLASTX:Maize        |
| Start    | 52                                   | End     | 253                  |
| GI       | none                                 | Score   | 175                  |
| Exons    | 52..249, 52..249, 119..250, 146..253 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22652                      | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47122                      | Strand  | +                    |
| Start    | 406                        | End     | 1206                 |
| Name     | OJ990405_06.9A01.C27.ol.gs | Method  | GENSCAN              |

|       |           |       |      |
|-------|-----------|-------|------|
| Start | 406       | End   | 1206 |
| GI    | none      | Score | .96  |
| Exons | 406..1206 |       |      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22652                                  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No.    | 47122                                  | Strand  | +                    |
| Start       | 406                                    | End     | 1206                 |
| Name        | OJ990405_06.9A01.C27.o1.np             | Method  | AAT/NAP              |
| Start       | 406                                    | End     | 1203                 |
| GI          | 4512231                                | Score   | 1333                 |
| Exons       | 406..1203                              |         |                      |
| GI Descrip. | (AB014741) ORF0 protein [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22652   | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No.    | 47123   | Strand  | +                    |
| Start       | 1408  | End     | 5870                 |
| Name        | OJ990405_06.9A01.C27.o2.np                          | Method  | AAT/NAP              |
| Start       | 1408  | End     | 5870                 |
| GI          | 4680179   | Score   | 5547                 |
| Exons       | 1408..2452, 2480..5870                              |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22652                      | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47124                      | Strand  | +                    |
| Start    | 6383                       | End     | 7090                 |
| Name     | OJ990405_06.9A01.C27.o3.gs | Method  | GENSCAN              |
| Start    | 6383                       | End     | 7090                 |
| GI       | none                       | Score   | .9                   |
| Exons    | 6383..7090                 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47125  | Strand  | +                    |
| Start    | 8910   | End     | 13096                |
| Name     | OJ990405_06.9A01.C27.o4.gs   | Method  | GENSCAN              |
| Start    | 8910   | End     | 13096                |
| GI       | none   | Score   | .73                  |
| Exons    | 8910..9035, 10144..10344, 10961..11065, 11120..11442, 11552..11877, 11955..12142, 12217..12406, 12645..13096 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o12.tw                                | Method  | TBLASTX:Wheat        |
| Start    | 1473   | End     | 1822                 |
| GI       | none   | Score   | 39                   |
| Exons    | 1473..1541, 1490..1531, 1624..1821, 1625..1822, 1649..1822 |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22652                       | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                       | Strand  | -                    |
| Start    | 13431                       | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o10.tw | Method  | TBLASTX:Wheat        |
| Start    | 1871                        | End     | 2224                 |
| GI       | none                        | Score   | 310                  |
| Exons    | 1871..2161, 1874..2224      |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22652 | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126 | Strand  | -                    |

|       |                                    |        |               |
|-------|------------------------------------|--------|---------------|
| Start | 13431                              | End    | 20321         |
| Name  | OJ990405_06.9A01.C27.o9.tm         | Method | TBLASTX:Maize |
| Start | 1874                               | End    | 2179          |
| GI    | none                               | Score  | 231           |
| Exons | 1874..2179, 1900..2031, 1901..2161 |        |               |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22652                       | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                       | Strand  | -                    |
| Start    | 13431                       | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o11.tw | Method  | TBLASTX:Wheat        |
| Start    | 2558                        | End     | 2902                 |
| GI       | none                        | Score   | 250                  |
| Exons    | 2558..2902                  |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22652                       | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                       | Strand  | -                    |
| Start    | 13431                       | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o11.tm | Method  | TBLASTX:Maize        |
| Start    | 2945                        | End     | 3108                 |
| GI       | none                        | Score   | 186                  |
| Exons    | 2945..3106, 2953..3108      |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o4.tw                       | Method  | TBLASTX:Wheat        |
| Start    | 3043   | End     | 16353                |
| GI       | none   | Score   | 532                  |
| Exons    | 3043..3483, 3044..3526, 3068..3523, 16036..16353 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22652                      | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                      | Strand  | -                    |
| Start    | 13431                      | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o5.ts | Method  | TBLASTX:Soybean      |
| Start    | 3080                       | End     | 16338                |
| GI       | none                       | Score   | 198                  |
| Exons    | 3080..3394, 16135..16338   |         |                      |

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 22652                                | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                                | Strand  | -                    |
| Start    | 13431                                | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o4.tm           | Method  | TBLASTX:Maize        |
| Start    | 3109                                 | End     | 16338                |
| GI       | none                                 | Score   | 369                  |
| Exons    | 3109..3351, 3113..3556, 16060..16338 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3467   | End     | 3862                 |
| GI       | none   | Score   | 57                   |
| Exons    | 3467..3499, 3467..3499, 3503..3556, 3505..3546, 3611..3862, 3619..3852 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22652 | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126 | Strand  | -                    |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o7.tm   | Method  | TBLASTX:Maize        |
| Start    | 3611   | End     | 3943                 |
| GI       | none   | Score   | 303                  |
| Exons    | 3611..3943, 3664..3942   |         |                      |
|          |  |         |                      |
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o7.tw   | Method  | TBLASTX:Wheat        |
| Start    | 3614   | End     | 15898                |
| GI       | none   | Score   | 369                  |
| Exons    | 3614..3877, 3616..3876, 15555..15704, 15674..15898                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o4.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3866   | End     | 15961                |
| GI       | none   | Score   | 78                   |
| Exons    | 3866..4000, 15531..15704, 15719..15961, 15771..15914                   |         |                      |
|          |  |         |                      |
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 3878   | End     | 4303                 |
| GI       | none   | Score   | 593                  |
| Exons    | 3878..4303, 3880..4296   |         |                      |
|          |  |         |                      |
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 3950   | End     | 4303                 |
| GI       | none   | Score   | 462                  |
| Exons    | 3950..4303, 3955..4296   |         |                      |
|          |  |         |                      |
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4331   | End     | 4860                 |
| GI       | none   | Score   | 466                  |
| Exons    | 4331..4771, 4415..4750, 4513..4761, 4769..4855, 4770..4856, 4771..4860 |         |                      |
|          |  |         |                      |
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4658   | End     | 4908                 |
| GI       | none   | Score   | 96                   |
| Exons    | 4658..4771, 4669..4764, 4765..4908, 4767..4907                         |         |                      |
|          |  |         |                      |
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |

|       |                                    |        |               |
|-------|------------------------------------|--------|---------------|
| Start | 13431                              | End    | 20321         |
| Name  | OJ990405_06.9A01.C27.o5.tm         | Method | TBLASTX:Maize |
| Start | 4718                               | End    | 4998          |
| GI    | none                               | Score  | 68            |
| Exons | 4718..4768, 4765..4998, 4770..4994 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4867   | End     | 14036                |
| GI       | none   | Score   | 597                  |
| Exons    | 4867..5400, 4926..5372, 5403..5492, 5405..5491, 13800..13910, 13938..14036 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 5046   | End     | 5630                 |
| GI       | none   | Score   | 229                  |
| Exons    | 5046..5204, 5047..5202, 5205..5366, 5206..5400, 5402..5629, 5403..5630 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22652                              | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                              | Strand  | -                    |
| Start    | 13431                              | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o9.tw         | Method  | TBLASTX:Wheat        |
| Start    | 5492                               | End     | 5825                 |
| GI       | none                               | Score   | 313                  |
| Exons    | 5492..5773, 5493..5825, 5643..5804 |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22652                       | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                       | Strand  | -                    |
| Start    | 13431                       | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o14.tw | Method  | TBLASTX:Wheat        |
| Start    | 10303                       | End     | 10593                |
| GI       | none                        | Score   | 207                  |
| Exons    | 10303..10593                |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o13.tw                            | Method  | TBLASTX:Wheat        |
| Start    | 11097  | End     | 18239                |
| GI       | none   | Score   | 57                   |
| Exons    | 11097..11165, 17838..18068, 18062..18238, 18177..18239 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22652   | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126   | Strand  | -                    |
| Start    | 13431   | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o5.gs  | Method  | GENSCAN              |
| Start    | 13431   | End     | 20321                |
| GI       | none  | Score   | .66                  |
| Exons    | 13431..14008, 14362..14401, 14685..15390, 15735..16027, 16234..16550, 16611..17270, 17411..17504, 17652..18068, 18122..18303, 18454..18659, 18851..19115, 19375..19493, |         |                      |

19574..19610, 20174..20321

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No.    | 47126  | Strand  | -                    |
| Start       | 13431  | End     | 20321                |
| Name        | OJ990405_06.9A01.C27.o3.np   | Method  | AAT/NAP              |
| Start       | 13467  | End     | 19537                |
| GI          | 5922631  | Score   | 6579                 |
| Exons       | 13467..15990, 16596..17524, 17652..17810, 17853..18421, 18467..18663, 18924..19168, 19428..19537   |         |                      |
| GI Descrip. | (AP000492) ESTs C26347(C12145),AU078074(C12145) correspond to a region of the predicted gene.; similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativa] gi 6016864 dbj BAA85207.1  (AP000570) ESTs C26347(C12145),AU078074(C12145) correspond to a region of the predicted gene.; Similar to prpol; Zea mays retrotransposon Cinfu1-1. (AF049110) [Oryza sativ |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o8.tm                             | Method  | TBLASTX:Maize        |
| Start    | 13483  | End     | 13736                |
| GI       | none   | Score   | 91                   |
| Exons    | 13483..13584, 13485..13583, 13563..13736, 13564..13623 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o6.tw                             | Method  | TBLASTX:Wheat        |
| Start    | 14169  | End     | 14558                |
| GI       | none   | Score   | 50                   |
| Exons    | 14169..14216, 14171..14356, 14171..14557, 14247..14558 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652                                    | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                                    | Strand  | -                    |
| Start    | 13431                                    | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o3.tm               | Method  | TBLASTX:Maize        |
| Start    | 14201                                    | End     | 14563                |
| GI       | none                                     | Score   | 238                  |
| Exons    | 14201..14248, 14240..14563, 14253..14543 |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22652                       | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                       | Strand  | -                    |
| Start    | 13431                       | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o10.tm | Method  | TBLASTX:Maize        |
| Start    | 14790                       | End     | 15113                |
| GI       | none                        | Score   | 210                  |
| Exons    | 14790..15113                |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22652                      | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                      | Strand  | -                    |
| Start    | 13431                      | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o5.tw | Method  | TBLASTX:Wheat        |
| Start    | 14874                      | End     | 15296                |
| GI       | none                       | Score   | 226                  |
| Exons    | 14874..15296, 14950..15291 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o3.ts                             | Method  | TBLASTX:Soybean      |
| Start    | 14917  | End     | 15305                |
| GI       | none   | Score   | 113                  |
| Exons    | 14917..15165, 14919..15161, 15201..15305, 15211..15297 |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22652                       | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                       | Strand  | -                    |
| Start    | 13431                       | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o15.tw | Method  | TBLASTX:Wheat        |
| Start    | 15297                       | End     | 15491                |
| GI       | none                        | Score   | 89                   |
| Exons    | 15297..15491, 15301..15474  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o6.tm   | Method  | TBLASTX:Maize        |
| Start    | 15423  | End     | 15863                |
| GI       | none   | Score   | 42                   |
| Exons    | 15423..15446, 15444..15587, 15456..15572, 15612..15707, 15681..15863, 15701..15862 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22652  | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126  | Strand  | -                    |
| Start    | 13431  | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o8.tw   | Method  | TBLASTX:Wheat        |
| Start    | 16462  | End     | 17256                |
| GI       | none   | Score   | 98                   |
| Exons    | 16462..16695, 16463..16624, 16799..17035, 16801..17031, 17068..17256, 17147..17254 |         |                      |

|          |                             |         |                      |
|----------|-----------------------------|---------|----------------------|
| Seq. No. | 22652                       | Seq. ID | OJ990405_06.9A01.C27 |
| Gene No. | 47126                       | Strand  | -                    |
| Start    | 13431                       | End     | 20321                |
| Name     | OJ990405_06.9A01.C27.o12.tm | Method  | TBLASTX:Maize        |
| Start    | 16771                       | End     | 16948                |
| GI       | none                        | Score   | 109                  |
| Exons    | 16771..16947, 16802..16948  |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22653   | Seq. ID | OJ990405_06.9A01.C28 |
| Gene No. | 47127   | Strand  | +                    |
| Start    | 433   | End     | 2919                 |
| Name     | OJ990405_06.9A01.C28.o1.gs  | Method  | GENSCAN              |
| Start    | 433   | End     | 2919                 |
| GI       | none  | Score   | .49                  |
| Exons    | 433..742, 817..1073, 1649..2022, 2370..2506, 2545..2659, 2790..2919 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22653                      | Seq. ID | OJ990405_06.9A01.C28 |
| Gene No. | 47128                      | Strand  | +                    |
| Start    | 6191                       | End     | 11174                |
| Name     | OJ990405_06.9A01.C28.o1.np | Method  | AAT/NAP              |
| Start    | 6191                       | End     | 11174                |

GI 4589852 Score 945  
 Exons 6191..6445, 6846..6974, 7066..7155, 7729..7917, 8606..8690, 9284..9450, 10794..10982, 11093..11174  
 GI Descrip. (AB025968) cycloartenol synthase [Glycyrrhiza glabra]

Seq. No. 22653 Seq. ID OJ990405\_06.9A01.C28  
 Gene No. 47128 Strand +  
 Start 6191 End 11174  
 Name OJ990405\_06.9A01.C28.o3.gs Method GENSCAN  
 Start 6191 End 10915  
 GI none Score .84  
 Exons 6191..6388, 6774..6974, 7066..7155, 7729..7917, 9284..9450, 10182..10445, 10765..10915

Seq. No. 22653 Seq. ID OJ990405\_06.9A01.C28  
 Gene No. 47128 Strand +  
 Start 6191 End 11174  
 Name OJ990405\_06.9A01.C28.o2.gp Method AAT/GAP  
 Start 10153 End 10675  
 GI uC-osflcyp175e08b1 Score 990  
 Exons 10153..10675  
 GI Descrip. '576771/gb|U16256|OSU16256 0.0e+00 Oryza sativa cone SR1  
 sucrose-regulated mRNA, 3'-end sequence'

Seq. No. 22653 Seq. ID OJ990405\_06.9A01.C28  
 Gene No. 47129 Strand -  
 Start 3365 End 5184  
 Name OJ990405\_06.9A01.C28.o2.gs Method GENSCAN  
 Start 3365 End 5184  
 GI none Score .74  
 Exons 3365..3493, 3831..3967, 4938..5184

Seq. No. 22653 Seq. ID OJ990405\_06.9A01.C28  
 Gene No. 47129 Strand -  
 Start 3365 End 5184  
 Name OJ990405\_06.9A01.C28.o1.gp Method AAT/GAP  
 Start 3592 End 4086  
 GI 576771 Score 757  
 Exons 3592..3804, 3831..4086  
 GI Descrip. 576771/gb|U16256|OSU16256 0.0e+00 Oryza sativa cone SR1  
 sucrose-regulated mRNA, 3'-end sequence

Seq. No. 22653 Seq. ID OJ990405\_06.9A01.C28  
 Gene No. 47130 Strand  
 Start 6185 End 10985  
 Name OJ990405\_06.9A01.C28.o2.ts Method TBLASTX:Soybean  
 Start 6185 End 7140  
 GI none Score 195  
 Exons 6185..6388, 6185..6316, 6759..6788, 6761..6787, 6846..6968, 6909..6977, 7066..7140, 7083..7139

Seq. No. 22653 Seq. ID OJ990405\_06.9A01.C28  
 Gene No. 47130 Strand  
 Start 6185 End 10985  
 Name OJ990405\_06.9A01.C28.o2.tm Method TBLASTX:Maize  
 Start 6187 End 6388  
 GI none Score 110



Exons 6187..6294, 6189..6269, 6191..6388, 6191..6388

Seq. No. 22653 Seq. ID OJ990405\_06.9A01.C28  
Gene No. 47130 Strand  
Start 6185 End 10985  
Name OJ990405\_06.9A01.C28.o1.tc Method TBLASTX:Cress  
Start 6188 End 10985  
GI none Score 211  
Exons 6188..6388, 6830..6967, 6831..6968, 7066..7155, 7726..7833,  
7728..7829, 7816..7920, 7842..7919, 8606..8692, 8611..8694,  
9275..9376, 9282..9404, 9283..9450, 9292..9450, 10791..10985,  
10818..10985

Seq. No. 22653 Seq. ID OJ990405\_06.9A01.C28  
Gene No. 47130 Strand  
Start 6185 End 10985  
Name OJ990405\_06.9A01.C28.o1.tm Method TBLASTX:Maize  
Start 6792 End 7827  
GI none Score 187  
Exons 6792..6977, 6795..6968, 6827..6979, 6833..6988, 7065..7151,  
7065..7151, 7066..7155, 7066..7155, 7726..7827, 7728..7826

Seq. No. 22653 Seq. ID OJ990405\_06.9A01.C28  
Gene No. 47130 Strand  
Start 6185 End 10985  
Name OJ990405\_06.9A01.C28.o1.ts Method TBLASTX:Soybean  
Start 7726 End 10985  
GI none Score 117  
Exons 7726..7839, 7728..7859, 7816..7920, 7854..7919, 8606..8692,  
8606..8692, 8611..8694, 9283..9450, 9303..9443, 10791..10985

Seq. No. 22653 Seq. ID OJ990405\_06.9A01.C28  
Gene No. 47130 Strand  
Start 6185 End 10985  
Name OJ990405\_06.9A01.C28.o3.tm Method TBLASTX:Maize  
Start 8606 End 10985  
GI none Score 133  
Exons 8606..8692, 8611..8694, 9283..9450, 9303..9452, 10791..10985,  
10791..10985

Seq. No. 22654 Seq. ID OJ990405\_06.9A01.C29  
Gene No. 47131 Strand +  
Start 415 End 993  
Name OJ990405\_06.9A01.C29.o1.gp Method AAT/GAP  
Start 415 End 549  
GI uC-osflcyp065e03b1 Score 204  
Exons 415..549  
GI Descrip. '541855/pir||A49398 4.0e-50 cycloartenol synthase (EC 5.4.99.8)  
- Arabidopsis thaliana'

Seq. No. 22654 Seq. ID OJ990405\_06.9A01.C29  
Gene No. 47131 Strand +  
Start 415 End 993  
Name OJ990405\_06.9A01.C29.o1.np Method AAT/NAP  
Start 436 End 993  
GI 584882 Score 120  
Exons 436..550, 944..993

GI Descrip. CYCLOARTENOL SYNTHASE (2,3-EPOXYSQUALENE--CYCLOARTENOL CYCLASE)  
gi|452446 (U02555) cycloartenol synthase; (S)-2,3-epoxysqualene  
mutase [Arabidopsis thaliana]

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22655  | Seq. ID | OJ990405_06.9A01.C30 |
| Gene No.    | 47132  | Strand  | +                    |
| Start       | 1  | End     | 712                  |
| Name        | OJ990405_06.9A01.C30.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 712                  |
| GI          | 6691716  | Score   | 373                  |
| Exons       | 1..109, 184..279, 429..549, 612..712   |         |                      |
| GI Descrip. | (AP000492) hypothetical protein [Oryza sativa]<br>gi 6691717 dbj BAA89397.1  (AP000570) hypothetical protein<br>[Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22655                      | Seq. ID | OJ990405_06.9A01.C30 |
| Gene No. | 47132                      | Strand  | +                    |
| Start    | 1                          | End     | 712                  |
| Name     | OJ990405_06.9A01.C30.o1.gs | Method  | GENSCAN              |
| Start    | 184                        | End     | 373                  |
| GI       | none                       | Score   | .82                  |
| Exons    | 184..373                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22656  | Seq. ID | OJ990405_06.9A01.C31 |
| Gene No.    | 47133  | Strand  | -                    |
| Start       | 497  | End     | 574                  |
| Name        | OJ990405_06.9A01.C31.o1.gp   | Method  | AAT/GAP              |
| Start       | 497  | End     | 574                  |
| GI          | LIB3477-003-P1-K1-E9   | Score   | 120                  |
| Exons       | 497..574   |         |                      |
| GI Descrip. | '2498586/sp Q40638 MPO1_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY<br>S 1 PRECURSOR (ORY S I) >gi_1173557 (U31771) Ory s 1 [Oryza<br>sativa]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22657  | Seq. ID | OJ990405_06.9A01.C32 |
| Gene No. | 47134  | Strand  | -                    |
| Start    | 648  | End     | 974                  |
| Name     | OJ990405_06.9A01.C32.o1.tm                       | Method  | TBLASTX:Maize        |
| Start    | 450  | End     | 963                  |
| GI       | none   | Score   | 75                   |
| Exons    | 450..551, 549..629, 696..842, 712..840, 892..963 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22657                      | Seq. ID | OJ990405_06.9A01.C32 |
| Gene No. | 47134                      | Strand  | -                    |
| Start    | 648                        | End     | 974                  |
| Name     | OJ990405_06.9A01.C32.o1.gs | Method  | GENSCAN              |
| Start    | 648                        | End     | 974                  |
| GI       | none                       | Score   | .57                  |
| Exons    | 648..974                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22658                      | Seq. ID | OJ990405_06.9A01.C34 |
| Gene No. | 47135                      | Strand  | -                    |
| Start    | 1                          | End     | 677                  |
| Name     | OJ990405_06.9A01.C34.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 677                  |
| GI       | 5902444                    | Score   | 974                  |
| Exons    | 1..677                     |         |                      |

GI Descrip. (AB030283) GAG-POL precursor [Oryza sativa]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22658                      | Seq. ID | OJ990405_06.9A01.C34 |
| Gene No. | 47135                      | Strand  | -                    |
| Start    | 1                          | End     | 677                  |
| Name     | OJ990405_06.9A01.C34.o1.gs | Method  | GENSCAN              |
| Start    | 20                         | End     | 515                  |
| GI       | none                       | Score   | .91                  |
| Exons    | 20..515                    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22658                      | Seq. ID | OJ990405_06.9A01.C34 |
| Gene No. | 47135                      | Strand  | -                    |
| Start    | 1                          | End     | 677                  |
| Name     | OJ990405_06.9A01.C34.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 180                        | End     | 357                  |
| GI       | none                       | Score   | 109                  |
| Exons    | 180..356, 211..357         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22658                                  | Seq. ID | OJ990405_06.9A01.C34 |
| Gene No. | 47135                                  | Strand  | -                    |
| Start    | 1                                      | End     | 677                  |
| Name     | OJ990405_06.9A01.C34.o1.tw             | Method  | TBLASTX:Wheat        |
| Start    | 208                                    | End     | 664                  |
| GI       | none                                   | Score   | 163                  |
| Exons    | 208..444, 210..440, 521..664, 555..662 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22659                      | Seq. ID | OJ990405_06.9A01.C38 |
| Gene No. | 47136                      | Strand  | +                    |
| Start    | 55                         | End     | 89                   |
| Name     | OJ990405_06.9A01.C38.o1.gs | Method  | GENSCAN              |
| Start    | 55                         | End     | 89                   |
| GI       | none                       | Score   | .94                  |
| Exons    | 55..89                     |         |                      |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22660  | Seq. ID | OJ990405_01.9A01.C1 |
| Gene No.    | 47137  | Strand  | -                   |
| Start       | 1  | End     | 576                 |
| Name        | OJ990405_01.9A01.C1.o1.np  | Method  | AAT/NAP             |
| Start       | 1  | End     | 576                 |
| GI          | 5541721  | Score   | 442                 |
| Exons       | 1..374, 497..576   |         |                     |
| GI Descrip. | (AL096856) cell division cycle protein 23 homolog [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22660                     | Seq. ID | OJ990405_01.9A01.C1 |
| Gene No. | 47137                     | Strand  | -                   |
| Start    | 1                         | End     | 576                 |
| Name     | OJ990405_01.9A01.C1.o1.tm | Method  | TBLASTX:Maize       |
| Start    | 33                        | End     | 330                 |
| GI       | none                      | Score   | 282                 |
| Exons    | 33..314, 33..314, 37..330 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22660                     | Seq. ID | OJ990405_01.9A01.C1 |
| Gene No. | 47137                     | Strand  | -                   |
| Start    | 1                         | End     | 576                 |
| Name     | OJ990405_01.9A01.C1.o1.gs | Method  | GENSCAN             |
| Start    | 130                       | End     | 374                 |

GI none  
Exons 130..374

Score .7

Seq. No. 22660  
Gene No. 47137  
Start 1  
Name OJ990405\_01.9A01.C1.o1.ts  
Start 168  
GI none  
Exons 168..377, 168..332, 173..376

Seq. ID OJ990405\_01.9A01.C1  
Strand -  
End 576  
Method TBLASTX:Soybean  
End 377  
Score 129

Seq. No. 22661  
Gene No. 47138  
Start 186  
Name OJ990405\_01.9A01.C6.o1.gs  
Start 186  
GI none  
Exons 186..268

Seq. ID OJ990405\_01.9A01.C6  
Strand -  
End 268  
Method GENSCAN  
End 268  
Score .59

Seq. No. 22662  
Gene No. 47139  
Start 769  
Name OJ990405\_01.9A01.C7.o1.gs  
Start 769  
GI none  
Exons 769..938

Seq. ID OJ990405\_01.9A01.C7  
Strand -  
End 938  
Method GENSCAN  
End 938  
Score .49

Seq. No. 22663  
Gene No. 47140  
Start 214  
Name OJ990405\_01.9A01.C8.o1.gs  
Start 214  
GI none  
Exons 214..352

Seq. ID OJ990405\_01.9A01.C8  
Strand +  
End 352  
Method GENSCAN  
End 352  
Score .77

Seq. No. 22664  
Gene No. 47141  
Start 333  
Name OJ990405\_01.9A01.C9.o1.gs  
Start 333  
GI none  
Exons 333..619, 672..844

Seq. ID OJ990405\_01.9A01.C9  
Strand -  
End 844  
Method GENSCAN  
End 844  
Score .73

Seq. No. 22665  
Gene No. 47142  
Start 105  
Name OJ990405\_01.9A01.C10.o1.tm  
Start 105  
GI none  
Exons 105..242, 108..242, 122..256, 124..255

Seq. ID OJ990405\_01.9A01.C10  
Strand -  
End 256  
Method TBLASTX:Maize  
End 256  
Score 121

Seq. No. 22666  
Gene No. 47143  
Start 1  
Name OJ990405\_01.9A01.C12.o1.np  
Start 1  
GI 6907088

Seq. ID OJ990405\_01.9A01.C12  
Strand -  
End 590  
Method AAT/NAP  
End 590  
Score 565

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Exons       | 1..277, 453..590   |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22666  | Seq. ID | OJ990405_01.9A01.C12 |
| Gene No.    | 47143  | Strand  | -                    |
| Start       | 1  | End     | 590                  |
| Name        | OJ990405_01.9A01.C12.o1.gs   | Method  | GENSCAN              |
| Start       | 39   | End     | 590                  |
| GI          | none   | Score   | .52                  |
| Exons       | 39..143, 453..590  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No.    | 47144  | Strand  | +                    |
| Start       | 2299   | End     | 3219                 |
| Name        | OJ990405_01.9A01.C13.o1.gp   | Method  | AAT/GAP              |
| Start       | 2299   | End     | 2956                 |
| GI          | 4716624  | Score   | 1223                 |
| Exons       | 2299..2956   |         |                      |
| GI Descrip. | 3434967/dbj BAA32418  3.0e-26 (AB008103) ethylene responsive element binding factor 1 [Arabidopsis thaliana] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No.    | 47144  | Strand  | +                    |
| Start       | 2299   | End     | 3219                 |
| Name        | OJ990405_01.9A01.C13.o1.np   | Method  | AAT/NAP              |
| Start       | 2412   | End     | 3219                 |
| GI          | 1208498  | Score   | 359                  |
| Exons       | 2412..2678, 2742..2963, 3003..3219   |         |                      |
| GI Descrip. | (D38126) EREBP-2 [Nicotiana tabacum]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No.    | 47145  | Strand  | +                    |
| Start       | 9964   | End     | 15916                |
| Name        | OJ990405_01.9A01.C13.o2.np   | Method  | AAT/NAP              |
| Start       | 9935   | End     | 12153                |
| GI          | 4538896  | Score   | 1602                 |
| Exons       | 9935..9988, 10054..10430, 10539..11054, 11115..12153   |         |                      |
| GI Descrip. | (AL049482) putative protein [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No.    | 47145  | Strand  | +                    |
| Start       | 9964   | End     | 15916                |
| Name        | OJ990405_01.9A01.C13.o2.gs   | Method  | GENSCAN              |
| Start       | 9964   | End     | 13296                |
| GI          | none   | Score   | .58                  |
| Exons       | 9964..10119, 10477..11017, 11504..11686, 11843..12175, 12401..12474, 13189..13296                            |         |                      |
|             |  |         |                      |
| Seq. No.    | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No.    | 47145  | Strand  | +                    |
| Start       | 9964   | End     | 15916                |
| Name        | OJ990405_01.9A01.C13.o3.np   | Method  | AAT/NAP              |
| Start       | 12871  | End     | 15913                |
| GI          | 2317905  | Score   | 460                  |
| Exons       | 12871..12890, 14279..14406, 14554..14757, 14879..14950, 15023..15439, 15512..15663, 15689..15913             |         |                      |
| GI Descrip. | (U89959) bZIP-like protein [Arabidopsis thaliana]  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667                                    | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47145                                    | Strand  | +                    |
| Start    | 9964                                     | End     | 15916                |
| Name     | OJ990405_01.9A01.C13.o3.gs               | Method  | GENSCAN              |
| Start    | 13850                                    | End     | 15916                |
| GI       | none                                     | Score   | .82                  |
| Exons    | 13850..14408, 14606..14757, 14879..15916 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No.    | 47145  | Strand  | +                    |
| Start       | 9964   | End     | 15916                |
| Name        | OJ990405_01.9A01.C13.o4.np                   | Method  | AAT/NAP              |
| Start       | 14147  | End     | 15526                |
| GI          | 600855                                       | Score   | 427                  |
| Exons       | 14147..14406, 14554..14757, 14879..15526     |         |                      |
| GI Descrip. | (U17887) bZIP protein [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146  | Strand  | -                    |
| Start    | 13534  | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o5.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 2285   | End     | 2635                 |
| GI       | none   | Score   | 48                   |
| Exons    | 2285..2380, 2307..2348, 2458..2523, 2459..2635, 2460..2627 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146  | Strand  | -                    |
| Start    | 13534  | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 2329   | End     | 2707                 |
| GI       | none   | Score   | 67                   |
| Exons    | 2329..2391, 2330..2368, 2361..2390, 2436..2627, 2444..2620, 2615..2707, 2618..2650 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146  | Strand  | -                    |
| Start    | 13534  | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o1.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 2352   | End     | 2960                 |
| GI       | none   | Score   | 45                   |
| Exons    | 2352..2390, 2498..2578, 2499..2579, 2750..2947, 2751..2960 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146  | Strand  | -                    |
| Start    | 13534  | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 2499   | End     | 2960                 |
| GI       | none   | Score   | 102                  |
| Exons    | 2499..2588, 2501..2599, 2741..2947, 2742..2960 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22667                      | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146                      | Strand  | -                    |
| Start    | 13534                      | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o6.tm | Method  | TBLASTX:Maize        |
| Start    | 2726                       | End     | 2960                 |
| GI       | none                       | Score   | 223                  |

Exons 2726..2956, 2727..2960

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22667                      | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146                      | Strand  | -                    |
| Start    | 13534                      | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o3.tm | Method  | TBLASTX:Maize        |
| Start    | 7903                       | End     | 8184                 |
| GI       | none                       | Score   | 72                   |
| Exons    | 7903..8184, 8014..8178     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146  | Strand  | -                    |
| Start    | 13534  | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o1.tm                             | Method  | TBLASTX:Maize        |
| Start    | 10948  | End     | 11343                |
| GI       | none   | Score   | 266                  |
| Exons    | 10948..11256, 10983..11150, 11266..11343, 11268..11321 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22667   | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No.    | 47146   | Strand  | -                    |
| Start       | 13534   | End     | 18459                |
| Name        | OJ990405_01.9A01.C13.o6.np  | Method  | AAT/NAP              |
| Start       | 13534   | End     | 18451                |
| GI          | 2245109   | Score   | 158                  |
| Exons       | 13534..13636, 14931..14965, 17561..17642, 17728..17786, 18352..18451      |         |                      |
| GI Descrip. | (Z97343) carboxyl-terminal proteinase like protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22667                      | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146                      | Strand  | -                    |
| Start    | 13534                      | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o7.tm | Method  | TBLASTX:Maize        |
| Start    | 13876                      | End     | 14143                |
| GI       | none                       | Score   | 132                  |
| Exons    | 13876..14121, 14018..14143 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146  | Strand  | -                    |
| Start    | 13534  | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 14231  | End     | 15916                |
| GI       | none   | Score   | 101                  |
| Exons    | 14231..14410, 14671..14784, 14866..14943, 14873..15208, 15046..15183, 15134..15337, 15206..15331, 15650..15916, 15664..15891 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146  | Strand  | -                    |
| Start    | 13534  | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o2.ts                             | Method  | TBLASTX:Soybean      |
| Start    | 14276  | End     | 15208                |
| GI       | none   | Score   | 97                   |
| Exons    | 14276..14410, 14284..14412, 14671..14757, 14873..15208 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22667 | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146 | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 13534                                    | End    | 18459         |
| Name  | OJ990405_01.9A01.C13.o2.tm               | Method | TBLASTX:Maize |
| Start | 14879                                    | End    | 15358         |
| GI    | none                                     | Score  | 290           |
| Exons | 14879..15358, 15046..15333, 15236..15343 |        |               |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22667                      | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146                      | Strand  | -                    |
| Start    | 13534                      | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 15715                      | End     | 15895                |
| GI       | none                       | Score   | 241                  |
| Exons    | 15715..15891, 15716..15895 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22667   | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No.    | 47146   | Strand  | -                    |
| Start       | 13534   | End     | 18459                |
| Name        | OJ990405_01.9A01.C13.o2.gp  | Method  | AAT/GAP              |
| Start       | 16181   | End     | 17609                |
| GI          | 3896 1.R1084  | Score   | 1073                 |
| Exons       | 16181..16584, 16917..16993, 17086..17134, 17568..17609  |         |                      |
| GI Descrip. | '5174741/ref NP_005993.1 pUCHL3  1.0e-12 ubiquitin carboxyl-terminal esterase L3 (ubiquitin thiolesterase) >gi_136682_sp_P15374_UBL3_HUMAN_UBIQUITIN_CARBOXYL-TERMINAL_HYDROLASE_ISOZYME_L3_(UCH-L3) (UBIQUITIN THIOLESTERASE L3) >gi_108014_pir_A40085_ubiquitin_carboxyl-terminal_proteinase (EC 3.4.-.-) L3- human >gi_2914274_pdb_1UCH_ Deubiquitinating Enzyme Uch-L3 (Human) At 1.8 Angstr' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146  | Strand  | -                    |
| Start    | 13534  | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o8.tm   | Method  | TBLASTX:Maize        |
| Start    | 16478  | End     | 17800                |
| GI       | none   | Score   | 113                  |
| Exons    | 16478..16606, 16507..16587, 16915..17010, 16916..16993, 16917..16994, 17045..17134, 17085..17135, 17567..17647, 17568..17645, 17728..17793, 17728..17793, 17732..17800, 17735..17797 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146  | Strand  | -                    |
| Start    | 13534  | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o4.gs   | Method  | GENSCAN              |
| Start    | 16498  | End     | 18457                |
| GI       | none   | Score   | .68                  |
| Exons    | 16498..16584, 17108..17134, 17568..17642, 17728..17786, 18352..18457 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22667  | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146  | Strand  | -                    |
| Start    | 13534  | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o5.np   | Method  | AAT/NAP              |
| Start    | 16498  | End     | 18445                |
| GI       | 5052490  | Score   | 100                  |
| Exons    | 16498..16584, 16917..17001, 17521..17642, 17728..17792, 18364..18445 |         |                      |



GI Descrip. (AF145600) ubiquitin carboxy-terminal hydrolase [Drosophila melanogaster]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22667                      | Seq. ID | OJ990405_01.9A01.C13 |
| Gene No. | 47146                      | Strand  | -                    |
| Start    | 13534                      | End     | 18459                |
| Name     | OJ990405_01.9A01.C13.o3.gp | Method  | AAT/GAP              |
| Start    | 18340                      | End     | 18459                |
| GI       | LIB3431-038-P1-K1-H12      | Score   | 182                  |

Exons 18340..18459  
GI Descrip. '2245109/emb|CAB10531.1| 2.0e-34 (Z97343) carboxyl-terminal proteinase like protein [Arabidopsis thaliana]'

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22668                      | Seq. ID | OJ990405_01.9A01.C14 |
| Gene No. | 47147                      | Strand  | -                    |
| Start    | 1                          | End     | 1261                 |
| Name     | OJ990405_01.9A01.C14.o1.np | Method  | AAT/NAP              |
| Start    | 1                          | End     | 1260                 |
| GI       | 2245109                    | Score   | 177                  |

Exons 1..125, 915..1042, 1186..1260  
GI Descrip. (Z97343) carboxyl-terminal proteinase like protein [Arabidopsis thaliana]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22668                      | Seq. ID | OJ990405_01.9A01.C14 |
| Gene No. | 47147                      | Strand  | -                    |
| Start    | 1                          | End     | 1261                 |
| Name     | OJ990405_01.9A01.C14.o1.gp | Method  | AAT/GAP              |
| Start    | 38                         | End     | 152                  |
| GI       | 12650_1.R1084              | Score   | 165                  |

Exons 38..152  
GI Descrip. '5803242/dbj|AP000399.1|AP000399 2.0e-24 Oryza sativa genomic DNA, chromosome 6, clone:P0535G04'

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22668                      | Seq. ID | OJ990405_01.9A01.C14 |
| Gene No. | 47147                      | Strand  | -                    |
| Start    | 1                          | End     | 1261                 |
| Name     | OJ990405_01.9A01.C14.o1.gs | Method  | GENSCAN              |
| Start    | 253                        | End     | 1236                 |
| GI       | none                       | Score   | .93                  |

Exons 253..335, 760..873, 911..1141, 1186..1236

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22668                      | Seq. ID | OJ990405_01.9A01.C14 |
| Gene No. | 47147                      | Strand  | -                    |
| Start    | 1                          | End     | 1261                 |
| Name     | OJ990405_01.9A01.C14.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 744                        | End     | 1254                 |
| GI       | none                       | Score   | 43                   |

Exons 744..791, 758..787, 909..1043, 911..1045, 911..1045, 1181..1252, 1186..1254, 1186..1251

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22668                      | Seq. ID | OJ990405_01.9A01.C14 |
| Gene No. | 47147                      | Strand  | -                    |
| Start    | 1                          | End     | 1261                 |
| Name     | OJ990405_01.9A01.C14.o2.gp | Method  | AAT/GAP              |
| Start    | 759                        | End     | 1261                 |
| GI       | LIB3431-038-P1-K1-H12      | Score   | 462                  |

Exons 759..813, 911..1042, 1186..1261

GI Descrip. '2245109/emb|CAB10531.1| 2.0e-34 (Z97343) carboxyl-terminal  
proteinase like protein [Arabidopsis thaliana]'

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22668                            | Seq. ID | OJ990405_01.9A01.C14 |
| Gene No. | 47147                            | Strand  | -                    |
| Start    | 1                                | End     | 1261                 |
| Name     | OJ990405_01.9A01.C14.o1.ts       | Method  | TBLASTX:Soybean      |
| Start    | 914                              | End     | 1248                 |
| GI       | none                             | Score   | 109                  |
| Exons    | 914..1045, 918..1043, 1186..1248 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22669  | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47148  | Strand  | +                    |
| Start    | 1443   | End     | 7831                 |
| Name     | OJ990405_01.9A01.C15.o1.gs   | Method  | GENSCAN              |
| Start    | 1443   | End     | 7831                 |
| GI       | none   | Score   | .65                  |
| Exons    | 1443..1621, 1955..1997, 2661..2710, 2904..3176, 3718..3813,<br>3970..4635, 5392..5426, 5873..5960, 6049..6184, 6282..6337,<br>6550..6693, 7176..7241, 7310..7559, 7656..7831 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22669                              | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47148                              | Strand  | +                    |
| Start    | 1443                               | End     | 7831                 |
| Name     | OJ990405_01.9A01.C15.o1.gp         | Method  | AAT/GAP              |
| Start    | 3129                               | End     | 4311                 |
| GI       | none                               | Score   | 906                  |
| Exons    | 3129..3176, 3718..3813, 3970..4311 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22669   | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47149   | Strand  | -                    |
| Start    | 8337  | End     | 10684                |
| Name     | OJ990405_01.9A01.C15.o3.ts  | Method  | TBLASTX:Soybean      |
| Start    | 5710  | End     | 7441                 |
| GI       | none  | Score   | 54                   |
| Exons    | 5710..5766, 5849..5962, 5871..5960, 5874..5963, 5876..5962,<br>6069..6182, 6070..6183, 6287..6337, 6410..6466, 6411..6467,<br>6549..6695, 6550..6690, 7193..7252, 7307..7438, 7313..7441,<br>7339..7440 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22669   | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47149   | Strand  | -                    |
| Start    | 8337  | End     | 10684                |
| Name     | OJ990405_01.9A01.C15.o4.tm  | Method  | TBLASTX:Maize        |
| Start    | 6121  | End     | 6630                 |
| GI       | none  | Score   | 70                   |
| Exons    | 6121..6183, 6123..6182, 6277..6336, 6287..6337, 6394..6468,<br>6410..6472, 6411..6473, 6540..6629, 6549..6626, 6550..6630 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22669  | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47149  | Strand  | -                    |
| Start    | 8337   | End     | 10684                |
| Name     | OJ990405_01.9A01.C15.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 6632   | End     | 7855                 |
| GI       | none   | Score   | 98                   |
| Exons    | 6632..6694, 6633..6698, 6634..6693, 7169..7252, 7307..7465,<br>7311..7475, 7322..7501, 7345..7473, 7359..7475, 7495..7560, |         |                      |

7496..7561, 7654..7677, 7671..7838, 7705..7851, 7706..7855

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22669                      | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47149                      | Strand  | -                    |
| Start    | 8337                       | End     | 10684                |
| Name     | OJ990405_01.9A01.C15.o2.gs | Method  | GENSCAN              |
| Start    | 8337                       | End     | 10674                |
| GI       | none                       | Score   | .93                  |
| Exons    | 8337..9228, 9743..10674    |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22669  | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47149  | Strand  | -                    |
| Start    | 8337   | End     | 10684                |
| Name     | OJ990405_01.9A01.C15.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 8348   | End     | 10326                |
| GI       | none   | Score   | 82                   |
| Exons    | 8348..8386, 8435..8536, 8464..8541, 8533..8877, 8538..8879, 8928..8987, 8982..9020, 8986..9018, 9033..9233, 9040..9189, 9093..9227, 9742..10326, 9800..10099 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22669  | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47149  | Strand  | -                    |
| Start    | 8337   | End     | 10684                |
| Name     | OJ990405_01.9A01.C15.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 8348   | End     | 9822                 |
| GI       | none   | Score   | 77                   |
| Exons    | 8348..8395, 8464..8541, 8465..8536, 8533..8877, 8538..8879, 8898..8981, 8985..9233, 8986..9186, 9099..9203, 9742..9822, 9748..9822 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22669   | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No.    | 47149   | Strand  | -                    |
| Start       | 8337  | End     | 10684                |
| Name        | OJ990405_01.9A01.C15.o1.np                                | Method  | AAT/NAP              |
| Start       | 8351  | End     | 10684                |
| GI          | 2344901   | Score   | 1897                 |
| Exons       | 8351..9228, 9743..10684                                   |         |                      |
| GI Descrip. | (AC002388) putative protein kinase [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22669  | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47149  | Strand  | -                    |
| Start    | 8337   | End     | 10684                |
| Name     | OJ990405_01.9A01.C15.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 8366   | End     | 8816                 |
| GI       | none   | Score   | 39                   |
| Exons    | 8366..8419, 8366..8410, 8383..8541, 8444..8536, 8533..8814, 8538..8816 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22669  | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47149  | Strand  | -                    |
| Start    | 8337   | End     | 10684                |
| Name     | OJ990405_01.9A01.C15.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 8473   | End     | 9212                 |
| GI       | none   | Score   | 88                   |
| Exons    | 8473..8535, 8474..8536, 8479..8550, 8533..8880, 8541..8879, 8863..9189, 8886..9188, 9093..9212, 9179..9205 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22669  | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47149  | Strand  | -                    |
| Start    | 8337   | End     | 10684                |
| Name     | OJ990405_01.9A01.C15.o2.tm                         | Method  | TBLASTX:Maize        |
| Start    | 9741   | End     | 10368                |
| GI       | none   | Score   | 74                   |
| Exons    | 9741..9905, 9742..10368, 9800..10075, 10023..10214 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22669                      | Seq. ID | OJ990405_01.9A01.C15 |
| Gene No. | 47149                      | Strand  | -                    |
| Start    | 8337                       | End     | 10684                |
| Name     | OJ990405_01.9A01.C15.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 9823                       | End     | 10293                |
| GI       | none                       | Score   | 287                  |
| Exons    | 9823..10293, 9824..10099   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22670                      | Seq. ID | OJ990405_01.9A01.C16 |
| Gene No. | 47150                      | Strand  | -                    |
| Start    | 595                        | End     | 695                  |
| Name     | OJ990405_01.9A01.C16.o1.gs | Method  | GENSCAN              |
| Start    | 595                        | End     | 695                  |
| GI       | none                       | Score   | .45                  |
| Exons    | 595..695                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22671  | Seq. ID | OJ990405_01.9A01.C17 |
| Gene No. | 47151  | Strand  | -                    |
| Start    | 2858   | End     | 5672                 |
| Name     | OJ990405_01.9A01.C17.o2.gs   | Method  | GENSCAN              |
| Start    | 2858   | End     | 5652                 |
| GI       | none   | Score   | .83                  |
| Exons    | 2858..3034, 3203..3279, 3411..3514, 3885..3936, 5312..5419, 5496..5652 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22671  | Seq. ID | OJ990405_01.9A01.C17 |
| Gene No.    | 47151  | Strand  | -                    |
| Start       | 2858   | End     | 5672                 |
| Name        | OJ990405_01.9A01.C17.o1.np   | Method  | AAT/NAP              |
| Start       | 2861   | End     | 5344                 |
| GI          | 2245034  | Score   | 644                  |
| Exons       | 2861..3034, 3203..3279, 3411..3514, 3885..3936, 4044..4134, 4352..4426, 5231..5344 |         |                      |
| GI Descrip. | (Z97342) enoyl-CoA hydratase [Arabidopsis thaliana]                                |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22671   | Seq. ID | OJ990405_01.9A01.C17 |
| Gene No.    | 47151   | Strand  | -                    |
| Start       | 2858  | End     | 5672                 |
| Name        | OJ990405_01.9A01.C17.o1.gp  | Method  | AAT/GAP              |
| Start       | 2867  | End     | 3940                 |
| GI          | LIB3433-055-P1-K1-E3  | Score   | 788                  |
| Exons       | 2867..3034, 3203..3279, 3411..3514, 3856..3940  |         |                      |
| GI Descrip. | '2245034/emb CAB10453.1  4.0e-46 (Z97342) enoyl-CoA hydratase [Arabidopsis thaliana]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22671                      | Seq. ID | OJ990405_01.9A01.C17 |
| Gene No. | 47151                      | Strand  | -                    |
| Start    | 2858                       | End     | 5672                 |
| Name     | OJ990405_01.9A01.C17.o2.gp | Method  | AAT/GAP              |

Start 4063 End 5672  
 GI uC-osflM202054h12b1 Score 916  
 Exons 4063..4134, 4352..4426, 5231..5400, 5496..5672  
 GI Descrip. '2245034/emb|CAB10453.1| 9.0e-17 (Z97342) enoyl-CoA hydratase [Arabidopsis thaliana]'

Seq. No. 22671 Seq. ID OJ990405\_01.9A01.C17  
 Gene No. 47152 Strand -  
 Start 6635 End 10216  
 Name OJ990405\_01.9A01.C17.o1.tw Method TBLASTX:Wheat  
 Start 2815 End 6771  
 GI none Score 144  
 Exons 2815..2976, 2852..2986, 2867..2992, 6635..6757, 6637..6747, 6637..6771

Seq. No. 22671 Seq. ID OJ990405\_01.9A01.C17  
 Gene No. 47152 Strand -  
 Start 6635 End 10216  
 Name OJ990405\_01.9A01.C17.o1.tm Method TBLASTX:Maize  
 Start 3884 End 10166  
 GI none Score 57  
 Exons 3884..3937, 3885..3938, 4042..4137, 4043..4135, 4352..4429, 5219..5407, 5229..5405, 5231..5422, 5494..5625, 5495..5581, 7830..7883, 7989..8087, 7990..8091, 8019..8093, 8236..8313, 8237..8311, 9056..9193, 9058..9225, 9058..9225, 9173..9229, 10080..10166

Seq. No. 22671 Seq. ID OJ990405\_01.9A01.C17  
 Gene No. 47152 Strand -  
 Start 6635 End 10216  
 Name OJ990405\_01.9A01.C17.o1.ts Method TBLASTX:Soybean  
 Start 5229 End 9234  
 GI none Score 48  
 Exons 5229..5273, 5231..5407, 5334..5408, 9058..9234

Seq. No. 22671 Seq. ID OJ990405\_01.9A01.C17  
 Gene No. 47152 Strand -  
 Start 6635 End 10216  
 Name OJ990405\_01.9A01.C17.o3.gs Method GENSCAN  
 Start 6635 End 10216  
 GI none Score .54  
 Exons 6635..6814, 6980..7056, 7139..7242, 7831..7882, 8033..8081, 9058..9227, 9615..9751, 9843..10049, 10077..10216

Seq. No. 22671 Seq. ID OJ990405\_01.9A01.C17  
 Gene No. 47152 Strand -  
 Start 6635 End 10216  
 Name OJ990405\_01.9A01.C17.o2.np Method AAT/NAP  
 Start 6638 End 9171  
 GI 2245034 Score 590  
 Exons 6638..6814, 6980..7056, 7139..7242, 7831..7882, 7991..8081, 8236..8310, 9058..9171  
 GI Descrip. (Z97342) enoyl-CoA hydratase [Arabidopsis thaliana]

Seq. No. 22672 Seq. ID OJ990405\_01.9A01.C18  
 Gene No. 47153 Strand -  
 Start 51 End 146

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Name        | OJ990405_01.9A01.C18.o1.gs                     | Method  | GENSCAN              |
| Start       | 51   | End     | 146                  |
| GI          | none   | Score   | .59                  |
| Exons       | 51..146  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22672  | Seq. ID | OJ990405_01.9A01.C18 |
| Gene No.    | 47154  | Strand  | -                    |
| Start       | 168  | End     | 529                  |
| Name        | OJ990405_01.9A01.C18.o1.np                     | Method  | AAT/NAP              |
| Start       | 168  | End     | 529                  |
| GI          | 6907088  | Score   | 530                  |
| Exons       | 168..529                                       |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22673  | Seq. ID | OJ990405_01.9A01.C19 |
| Gene No.    | 47155  | Strand  | +                    |
| Start       | 938  | End     | 1718                 |
| Name        | OJ990405_01.9A01.C19.o1.np                     | Method  | AAT/NAP              |
| Start       | 938  | End     | 1718                 |
| GI          | 6002794  | Score   | 1253                 |
| Exons       | 938..1718                                      |         |                      |
| GI Descrip. | (AF149813) unknown [Oryza sativa]              |         |                      |
|             |  |         |                      |
| Seq. No.    | 22673  | Seq. ID | OJ990405_01.9A01.C19 |
| Gene No.    | 47156  | Strand  | +                    |
| Start       | 2227   | End     | 3946                 |
| Name        | OJ990405_01.9A01.C19.o2.np                     | Method  | AAT/NAP              |
| Start       | 2227   | End     | 3946                 |
| GI          | 4539660  | Score   | 697                  |
| Exons       | 2227..3267, 3355..3946                         |         |                      |
| GI Descrip. | (AF061282) polyprotein [Sorghum bicolor]       |         |                      |
|             |  |         |                      |
| Seq. No.    | 22673  | Seq. ID | OJ990405_01.9A01.C19 |
| Gene No.    | 47156  | Strand  | +                    |
| Start       | 2227   | End     | 3946                 |
| Name        | OJ990405_01.9A01.C19.o2.tw                     | Method  | TBLASTX:Wheat        |
| Start       | 2434   | End     | 2805                 |
| GI          | none   | Score   | 263                  |
| Exons       | 2434..2805                                     |         |                      |
|             |  |         |                      |
| Seq. No.    | 22673  | Seq. ID | OJ990405_01.9A01.C19 |
| Gene No.    | 47156  | Strand  | +                    |
| Start       | 2227   | End     | 3946                 |
| Name        | OJ990405_01.9A01.C19.o1.tm                     | Method  | TBLASTX:Maize        |
| Start       | 2686   | End     | 3087                 |
| GI          | none   | Score   | 244                  |
| Exons       | 2686..3087                                     |         |                      |
|             |  |         |                      |
| Seq. No.    | 22673  | Seq. ID | OJ990405_01.9A01.C19 |
| Gene No.    | 47156  | Strand  | +                    |
| Start       | 2227   | End     | 3946                 |
| Name        | OJ990405_01.9A01.C19.o2.tm                     | Method  | TBLASTX:Maize        |
| Start       | 3397   | End     | 3720                 |
| GI          | none   | Score   | 200                  |
| Exons       | 3397..3720, 3444..3509                         |         |                      |
|             |  |         |                      |
| Seq. No.    | 22673  | Seq. ID | OJ990405_01.9A01.C19 |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Gene No.    | 47156   | Strand  | +                    |
| Start       | 2227  | End     | 3946                 |
| Name        | OJ990405_01.9A01.C19.o1.tw  | Method  | TBLASTX:Wheat        |
| Start       | 3402  | End     | 3801                 |
| GI          | none  | Score   | 166                  |
| Exons       | 3402..3557, 3403..3624, 3633..3752, 3637..3801  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22674   | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No.    | 47157   | Strand  | +                    |
| Start       | 1   | End     | 1524                 |
| Name        | OJ990405_01.9A01.C20.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 1524                 |
| GI          | 5257279   | Score   | 1842                 |
| Exons       | 1..1524   |         |                      |
| GI Descrip. | (AP000364) Similar to Transposon MAGGY gag and pol gene homologues. (L35053) [Oryza sativa] |         |                      |
|             |   |         |                      |
| Seq. No.    | 22674   | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No.    | 47157   | Strand  | +                    |
| Start       | 1   | End     | 1524                 |
| Name        | OJ990405_01.9A01.C20.o3.tw  | Method  | TBLASTX:Wheat        |
| Start       | 79  | End     | 442                  |
| GI          | none  | Score   | 159                  |
| Exons       | 79..261, 80..268, 344..442, 367..441  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22674   | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No.    | 47157   | Strand  | +                    |
| Start       | 1   | End     | 1524                 |
| Name        | OJ990405_01.9A01.C20.o1.gs  | Method  | GENSCAN              |
| Start       | 209   | End     | 1180                 |
| GI          | none  | Score   | .75                  |
| Exons       | 209..1180   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22674   | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No.    | 47157   | Strand  | +                    |
| Start       | 1   | End     | 1524                 |
| Name        | OJ990405_01.9A01.C20.o3.tm  | Method  | TBLASTX:Maize        |
| Start       | 317   | End     | 514                  |
| GI          | none  | Score   | 202                  |
| Exons       | 317..514, 367..513  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22674   | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No.    | 47157   | Strand  | +                    |
| Start       | 1   | End     | 1524                 |
| Name        | OJ990405_01.9A01.C20.o1.tw  | Method  | TBLASTX:Wheat        |
| Start       | 445   | End     | 928                  |
| GI          | none  | Score   | 539                  |
| Exons       | 445..900, 446..928, 473..919  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22674   | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No.    | 47157   | Strand  | +                    |
| Start       | 1   | End     | 1524                 |
| Name        | OJ990405_01.9A01.C20.o1.tm  | Method  | TBLASTX:Maize        |
| Start       | 515   | End     | 982                  |
| GI          | none  | Score   | 389                  |
| Exons       | 515..982, 586..945  |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22674  | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No. | 47157  | Strand  | +                    |
| Start    | 1  | End     | 1524                 |
| Name     | OJ990405_01.9A01.C20.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 869  | End     | 1263                 |
| GI       | none   | Score   | 56                   |
| Exons    | 869..901, 869..901, 886..981, 905..1108, 905..1048, 1021..1107, 1107..1235, 1108..1263 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22674  | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No. | 47157  | Strand  | +                    |
| Start    | 1  | End     | 1524                 |
| Name     | OJ990405_01.9A01.C20.o2.tw                               | Method  | TBLASTX:Wheat        |
| Start    | 977  | End     | 1377                 |
| GI       | none   | Score   | 161                  |
| Exons    | 977..1108, 977..1084, 1021..1107, 1108..1377, 1110..1376 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22674                              | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No. | 47157                              | Strand  | +                    |
| Start    | 1                                  | End     | 1524                 |
| Name     | OJ990405_01.9A01.C20.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 1164                               | End     | 1524                 |
| GI       | none                               | Score   | 58                   |
| Exons    | 1164..1433, 1164..1523, 1165..1524 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22674                      | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No. | 47157                      | Strand  | +                    |
| Start    | 1                          | End     | 1524                 |
| Name     | OJ990405_01.9A01.C20.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 1285                       | End     | 1524                 |
| GI       | none                       | Score   | 202                  |
| Exons    | 1285..1524                 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22674                              | Seq. ID | OJ990405_01.9A01.C20 |
| Gene No. | 47157                              | Strand  | +                    |
| Start    | 1                                  | End     | 1524                 |
| Name     | OJ990405_01.9A01.C20.o4.tw         | Method  | TBLASTX:Wheat        |
| Start    | 1378                               | End     | 1524                 |
| GI       | none                               | Score   | 218                  |
| Exons    | 1378..1524, 1380..1523, 1408..1524 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22675   | Seq. ID | OJ990405_01.9A01.C21 |
| Gene No.    | 47158   | Strand  | +                    |
| Start       | 1   | End     | 1552                 |
| Name        | OJ990405_01.9A01.C21.o1.np                          | Method  | AAT/NAP              |
| Start       | 1   | End     | 1552                 |
| GI          | 4680179   | Score   | 1803                 |
| Exons       | 1..1552   |         |                      |
| GI Descrip. | (AF111709) polyprotein [Oryza sativa subsp. indica] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22675                      | Seq. ID | OJ990405_01.9A01.C21 |
| Gene No. | 47158                      | Strand  | +                    |
| Start    | 1                          | End     | 1552                 |
| Name     | OJ990405_01.9A01.C21.o1.gs | Method  | GENSCAN              |
| Start    | 82                         | End     | 1539                 |
| GI       | none                       | Score   | .67                  |
| Exons    | 82..1539                   |         |                      |



|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22675                      | Seq. ID | OJ990405_01.9A01.C21 |
| Gene No. | 47158                      | Strand  | +                    |
| Start    | 1                          | End     | 1552                 |
| Name     | OJ990405_01.9A01.C21.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 156                        | End     | 680                  |
| GI       | none                       | Score   | 575                  |
| Exons    | 156..680, 308..676         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22675                                  | Seq. ID | OJ990405_01.9A01.C21 |
| Gene No. | 47158                                  | Strand  | +                    |
| Start    | 1                                      | End     | 1552                 |
| Name     | OJ990405_01.9A01.C21.o1.tc             | Method  | TBLASTX:Cress        |
| Start    | 387                                    | End     | 704                  |
| GI       | none                                   | Score   | 101                  |
| Exons    | 387..560, 408..560, 561..704, 563..688 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22675                        | Seq. ID | OJ990405_01.9A01.C21 |
| Gene No. | 47158                        | Strand  | +                    |
| Start    | 1                            | End     | 1552                 |
| Name     | OJ990405_01.9A01.C21.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 473                          | End     | 728                  |
| GI       | none                         | Score   | 295                  |
| Exons    | 473..718, 480..728, 600..728 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22675                        | Seq. ID | OJ990405_01.9A01.C21 |
| Gene No. | 47158                        | Strand  | +                    |
| Start    | 1                            | End     | 1552                 |
| Name     | OJ990405_01.9A01.C21.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 528                          | End     | 818                  |
| GI       | none                         | Score   | 378                  |
| Exons    | 528..818, 539..718, 600..815 |         |                      |

|          |                                 |         |                      |
|----------|---------------------------------|---------|----------------------|
| Seq. No. | 22675                           | Seq. ID | OJ990405_01.9A01.C21 |
| Gene No. | 47158                           | Strand  | +                    |
| Start    | 1                               | End     | 1552                 |
| Name     | OJ990405_01.9A01.C21.o1.tw      | Method  | TBLASTX:Wheat        |
| Start    | 687                             | End     | 1313                 |
| GI       | none                            | Score   | 672                  |
| Exons    | 687..1313, 782..1189, 834..1262 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22675  | Seq. ID | OJ990405_01.9A01.C21 |
| Gene No. | 47158  | Strand  | +                    |
| Start    | 1  | End     | 1552                 |
| Name     | OJ990405_01.9A01.C21.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 870  | End     | 1463                 |
| GI       | none   | Score   | 221                  |
| Exons    | 870..1028, 875..1021, 1025..1207, 1025..1168, 1026..1463, 1146..1262, 1244..1453, 1368..1463 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22675  | Seq. ID | OJ990405_01.9A01.C21 |
| Gene No. | 47158  | Strand  | +                    |
| Start    | 1  | End     | 1552                 |
| Name     | OJ990405_01.9A01.C21.o3.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 1314   | End     | 1550                 |
| GI       | none   | Score   | 248                  |
| Exons    | 1314..1550, 1321..1419, 1353..1538, 1409..1549 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22676  | Seq. ID | OJ990405_01.9A01.C22 |
| Gene No. | 47159  | Strand  | +                    |
| Start    | 6971   | End     | 10303                |
| Name     | OJ990405_01.9A01.C22.o2.gs                                   | Method  | GENSCAN              |
| Start    | 6971   | End     | 10303                |
| GI       | none   | Score   | .64                  |
| Exons    | 6971..7171, 7255..7417, 7430..7540, 8578..8783, 10223..10303 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22676  | Seq. ID | OJ990405_01.9A01.C22 |
| Gene No.    | 47160  | Strand  | -                    |
| Start       | 983  | End     | 2413                 |
| Name        | OJ990405_01.9A01.C22.o1.np                     | Method  | AAT/NAP              |
| Start       | 983  | End     | 2413                 |
| GI          | 6907088  | Score   | 1236                 |
| Exons       | 983..1369, 1862..2100, 2276..2413              |         |                      |
| GI Descrip. | (AP001129) hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22676  | Seq. ID | OJ990405_01.9A01.C22 |
| Gene No.    | 47161  | Strand  | -                    |
| Start       | 5281   | End     | 10752                |
| Name        | OJ990405_01.9A01.C22.o2.np   | Method  | AAT/NAP              |
| Start       | 5281   | End     | 10752                |
| GI          | 81286  | Score   | 80                   |
| Exons       | 5281..5452, 6262..6422, 7020..7122, 10695..10752   |         |                      |
| GI Descrip. | extensin - Volvox carteri (fragment) gi 21992 emb CAA46283  (X65165) extensin [Volvox carteri] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22676  | Seq. ID | OJ990405_01.9A01.C22 |
| Gene No. | 47161  | Strand  | -                    |
| Start    | 5281   | End     | 10752                |
| Name     | OJ990405_01.9A01.C22.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 7069   | End     | 7452                 |
| GI       | none   | Score   | 87                   |
| Exons    | 7069..7119, 7070..7120, 7100..7171, 7117..7170, 7252..7452, 7252..7452 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22676                              | Seq. ID | OJ990405_01.9A01.C22 |
| Gene No. | 47161                              | Strand  | -                    |
| Start    | 5281                               | End     | 10752                |
| Name     | OJ990405_01.9A01.C22.o1.ts         | Method  | TBLASTX:Soybean      |
| Start    | 8562                               | End     | 8930                 |
| GI       | none                               | Score   | 319                  |
| Exons    | 8562..8930, 8564..8767, 8583..8810 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22676  | Seq. ID | OJ990405_01.9A01.C22 |
| Gene No. | 47161  | Strand  | -                    |
| Start    | 5281   | End     | 10752                |
| Name     | OJ990405_01.9A01.C22.o2.tm                     | Method  | TBLASTX:Maize        |
| Start    | 8624   | End     | 8912                 |
| GI       | none   | Score   | 63                   |
| Exons    | 8624..8668, 8625..8693, 8715..8912, 8720..8911 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22677                      | Seq. ID | OJ990405_01.9A01.C23 |
| Gene No. | 47162                      | Strand  | +                    |
| Start    | 203                        | End     | 8739                 |
| Name     | OJ990405_01.9A01.C23.o1.gs | Method  | GENSCAN              |

|       |  |       |      |
|-------|--|-------|------|
| Start | 203  | End   | 8739 |
| GI    | none   | Score | .43  |
| Exons | 203..261, 1189..1316, 1506..1561, 2864..3064, 5693..5883, 6736..6925, 7575..7863, 8711..8739 |       |      |

  

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22677   | Seq. ID | OJ990405_01.9A01.C23 |
| Gene No.    | 47162   | Strand  | +                    |
| Start       | 203   | End     | 8739                 |
| Name        | OJ990405_01.9A01.C23.o1.np  | Method  | AAT/NAP              |
| Start       | 5201  | End     | 6545                 |
| GI          | 6630699   | Score   | 82                   |
| Exons       | 5201..5232, 6442..6545  |         |                      |
| GI Descrip. | (AP000969) hypothetical protein [Oryza sativa]<br>gi 6721536 dbj BAA89566.1  (AP001073) hypothetical protein [Oryza sativa] |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22677  | Seq. ID | OJ990405_01.9A01.C23 |
| Gene No.    | 47162  | Strand  | +                    |
| Start       | 203  | End     | 8739                 |
| Name        | OJ990405_01.9A01.C23.o2.np                     | Method  | AAT/NAP              |
| Start       | 5639   | End     | 7092                 |
| GI          | 6539570  | Score   | 161                  |
| Exons       | 5639..5675, 6713..6886, 7038..7092             |         |                      |
| GI Descrip. | (AP000836) hypothetical protein [Oryza sativa] |         |                      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22677                      | Seq. ID | OJ990405_01.9A01.C23 |
| Gene No. | 47163                      | Strand  | -                    |
| Start    | 10277                      | End     | 10729                |
| Name     | OJ990405_01.9A01.C23.o2.gs | Method  | GENSCAN              |
| Start    | 10277                      | End     | 10729                |
| GI       | none                       | Score   | .9                   |
| Exons    | 10277..10729               |         |                      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22678                      | Seq. ID | OJ990405_01.9A01.C24 |
| Gene No. | 47164                      | Strand  | +                    |
| Start    | 48                         | End     | 385                  |
| Name     | OJ990405_01.9A01.C24.o1.gs | Method  | GENSCAN              |
| Start    | 48                         | End     | 385                  |
| GI       | none                       | Score   | .5                   |
| Exons    | 48..385                    |         |                      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22678                      | Seq. ID | OJ990405_01.9A01.C24 |
| Gene No. | 47165                      | Strand  | +                    |
| Start    | 3438                       | End     | 3778                 |
| Name     | OJ990405_01.9A01.C24.o2.gs | Method  | GENSCAN              |
| Start    | 3438                       | End     | 3778                 |
| GI       | none                       | Score   | .92                  |
| Exons    | 3438..3509, 3551..3778     |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22678  | Seq. ID | OJ990405_01.9A01.C24 |
| Gene No.    | 47166  | Strand  | +                    |
| Start       | 8453   | End     | 8755                 |
| Name        | OJ990405_01.9A01.C24.o1.gp                                       | Method  | AAT/GAP              |
| Start       | 8453   | End     | 8755                 |
| GI          | 1675_2.R1084   | Score   | 583                  |
| Exons       | 8453..8755   |         |                      |
| GI Descrip. | '3763918 2.0e-59 (AC004450) putative isopropylmalate dehydratase |         |                      |

[Arabidopsis thaliana]'

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No.    | 47167  | Strand  | +                    |
| Start       | 671  | End     | 5706                 |
| Name        | OJ990405_01.9A01.C25.o2.np                               | Method  | AAT/NAP              |
| Start       | 671  | End     | 5706                 |
| GI          | 2245108  | Score   | 500                  |
| Exons       | 671..690, 4227..4389, 4973..5263, 5348..5416, 5561..5706 |         |                      |
| GI Descrip. | (297343) EREBP-4 like protein [Arabidopsis thaliana]     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No.    | 47167  | Strand  | +                    |
| Start       | 671  | End     | 5706                 |
| Name        | OJ990405_01.9A01.C25.o1.gp   | Method  | AAT/GAP              |
| Start       | 969  | End     | 1785                 |
| GI          | 1675_2.R1084   | Score   | 1581                 |
| Exons       | 969..1785  |         |                      |
| GI Descrip. | '3763918 2.0e-59 (AC004450) putative isopropylmalate dehydratase [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47167  | Strand  | +                    |
| Start    | 671  | End     | 5706                 |
| Name     | OJ990405_01.9A01.C25.o2.gs                     | Method  | GENSCAN              |
| Start    | 4208   | End     | 5706                 |
| GI       | none   | Score   | .53                  |
| Exons    | 4208..4325, 4976..5206, 5348..5428, 5579..5706 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22679                      | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47168                      | Strand  | -                    |
| Start    | 977                        | End     | 1750                 |
| Name     | OJ990405_01.9A01.C25.o1.gs | Method  | GENSCAN              |
| Start    | 977                        | End     | 1750                 |
| GI       | none                       | Score   | .97                  |
| Exons    | 977..1750                  |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No.    | 47168  | Strand  | -                    |
| Start       | 977  | End     | 1750                 |
| Name        | OJ990405_01.9A01.C25.o1.np   | Method  | AAT/NAP              |
| Start       | 980  | End     | 1729                 |
| GI          | 3763918  | Score   | 656                  |
| Exons       | 980..1729  |         |                      |
| GI Descrip. | (AC004450) 3-isopropylmalate dehydratase, small subunit [Arabidopsis thaliana] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22679                                       | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169                                       | Strand  | -                    |
| Start    | 9105  | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o1.tm                  | Method  | TBLASTX:Maize        |
| Start    | 976   | End     | 1510                 |
| GI       | none  | Score   | 186                  |
| Exons    | 976..1203, 980..1510, 981..1508, 1370..1510 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22679 | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169 | Strand  | -                    |

|       |   |        |               |
|-------|---|--------|---------------|
| Start | 9105  | End    | 13638         |
| Name  | OJ990405_01.9A01.C25.o1.tc  | Method | TBLASTX:Cress |
| Start | 977   | End    | 1525          |
| GI    | none  | Score  | 134           |
| Exons | 977..1108, 981..1103, 995..1114, 1118..1153, 1167..1226, 1178..1384, 1287..1370, 1391..1525, 1392..1523 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169  | Strand  | -                    |
| Start    | 9105   | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1001   | End     | 1600                 |
| GI       | none   | Score   | 146                  |
| Exons    | 1001..1156, 1002..1181, 1173..1364, 1178..1381, 1391..1600, 1392..1523 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169  | Strand  | -                    |
| Start    | 9105   | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 4195   | End     | 5789                 |
| GI       | none   | Score   | 176                  |
| Exons    | 4195..4323, 4196..4324, 4205..4324, 4971..5264, 4974..5264, 4975..5265, 5343..5411, 5344..5427, 5344..5439, 5369..5437, 5579..5599, 5611..5703, 5611..5703, 5625..5744, 5631..5738, 5763..5789 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169  | Strand  | -                    |
| Start    | 9105   | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4196   | End     | 5379                 |
| GI       | none   | Score   | 142                  |
| Exons    | 4196..4324, 4202..4324, 4971..5264, 4973..5260, 4973..5269, 4975..5271, 5344..5379 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169  | Strand  | -                    |
| Start    | 9105   | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 4211   | End     | 5262                 |
| GI       | none   | Score   | 145                  |
| Exons    | 4211..4324, 4231..4323, 4978..5148, 4986..5147, 5152..5262, 5178..5261 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169  | Strand  | -                    |
| Start    | 9105   | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4240   | End     | 5409                 |
| GI       | none   | Score   | 119                  |
| Exons    | 4240..4323, 4241..4324, 4971..5273, 4974..5252, 4975..5274, 5343..5396, 5344..5409 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22679 | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169 | Strand  | -                    |
| Start    | 9105  | End     | 13638                |

|       |  |        |         |
|-------|--|--------|---------|
| Name  | OJ990405_01.9A01.C25.o3.gs   | Method | GENSCAN |
| Start | 9105   | End    | 13548   |
| GI    | none   | Score  | .84     |
| Exons | 9105..9173, 9422..9544, 9724..9821, 10611..10725, 11132..11266, 11946..12016, 12785..12852, 13421..13548 |        |         |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22679   | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No.    | 47169   | Strand  | -                    |
| Start       | 9105  | End     | 13638                |
| Name        | OJ990405_01.9A01.C25.o2.gp  | Method  | AAT/GAP              |
| Start       | 9181  | End     | 10887                |
| GI          | 3801_1.R1084  | Score   | 1111                 |
| Exons       | 9181..9567, 9724..9821, 10611..10725, 10821..10887                  |         |                      |
| GI Descrip. | '3540182 3.0e-18 (AC004122) Unknown protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169  | Strand  | -                    |
| Start    | 9105   | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o3.tc   | Method  | TBLASTX:Cress        |
| Start    | 9763   | End     | 11207                |
| GI       | none   | Score   | 61                   |
| Exons    | 9763..9822, 9767..9811, 10666..10728, 10821..10865, 10957..11025, 11102..11206, 11124..11207 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No.    | 47169  | Strand  | -                    |
| Start       | 9105   | End     | 13638                |
| Name        | OJ990405_01.9A01.C25.o3.np   | Method  | AAT/NAP              |
| Start       | 10591  | End     | 13638                |
| GI          | 4539295  | Score   | 365                  |
| Exons       | 10591..10704, 10789..10873, 10914..11030, 11145..11266, 11626..11848, 11905..12035, 12774..12852, 13421..13638 |         |                      |
| GI Descrip. | (AL049480) putative protein [Arabidopsis thaliana]   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169  | Strand  | -                    |
| Start    | 9105   | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 10818  | End     | 11202                |
| GI       | none   | Score   | 114                  |
| Exons    | 10818..10865, 10957..11025, 11121..11201, 11122..11202, 11123..11200 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22679  | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169  | Strand  | -                    |
| Start    | 9105   | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 11068  | End     | 11698                |
| GI       | none   | Score   | 148                  |
| Exons    | 11068..11214, 11094..11270, 11096..11275, 11096..11275, 11618..11698, 11623..11697 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22679                      | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169                      | Strand  | -                    |
| Start    | 9105                       | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o3.tm | Method  | TBLASTX:Maize        |

|       |  |       |       |
|-------|--|-------|-------|
| Start | 11202  | End   | 12013 |
| GI    | none   | Score | 111   |
| Exons | 11202..11288, 11617..11703, 11624..11722, 11626..11727,<br>11726..11854, 11738..11857, 11746..11862, 11926..12012,<br>11940..12011, 11945..12013 |       |       |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22679   | Seq. ID | OJ990405_01.9A01.C25 |
| Gene No. | 47169   | Strand  | -                    |
| Start    | 9105  | End     | 13638                |
| Name     | OJ990405_01.9A01.C25.o2.tw  | Method  | TBLASTX:Wheat        |
| Start    | 11623   | End     | 12010                |
| GI       | none  | Score   | 151                  |
| Exons    | 11623..11706, 11624..11728, 11625..11732, 11626..11736,<br>11726..11854, 11727..11861, 11744..11854, 11749..11877,<br>11803..11862, 11931..12005, 11942..12007, 11943..12008,<br>11945..12010 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22680  | Seq. ID | OJ990405_01.9A01.C26 |
| Gene No. | 47170  | Strand  | +                    |
| Start    | 2240   | End     | 9819                 |
| Name     | OJ990405_01.9A01.C26.o1.gs   | Method  | GENSCAN              |
| Start    | 2240   | End     | 8997                 |
| GI       | none   | Score   | .48                  |
| Exons    | 2240..2293, 3315..3341, 3378..3617, 4445..4553, 4766..5126,<br>5369..5407, 5427..5626, 5694..5945, 6581..6990, 7191..7367,<br>7518..7742, 7832..8008, 8100..8336, 8845..8997 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22680  | Seq. ID | OJ990405_01.9A01.C26 |
| Gene No.    | 47170  | Strand  | +                    |
| Start       | 2240   | End     | 9819                 |
| Name        | OJ990405_01.9A01.C26.o1.np   | Method  | AAT/NAP              |
| Start       | 5768   | End     | 9819                 |
| GI          | 6006869  | Score   | 521                  |
| Exons       | 5768..5945, 6581..6989, 7172..7367, 7518..7742, 7832..8059,<br>9728..9819  |         |                      |
| GI Descrip. | (AC009540) putative cationic amino acid transporter [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22680  | Seq. ID | OJ990405_01.9A01.C26 |
| Gene No.    | 47170  | Strand  | +                    |
| Start       | 2240   | End     | 9819                 |
| Name        | OJ990405_01.9A01.C26.o2.gp   | Method  | AAT/GAP              |
| Start       | 7934   | End     | 8281                 |
| GI          | LIB3434-056-P1-K1-B12  | Score   | 431                  |
| Exons       | 7934..8008, 8100..8281   |         |                      |
| GI Descrip. | '1710780/sp P52810 RS9_PODAN 3.0e-13 40S RIBOSOMAL PROTEIN S9 (S7) >gi_1321917_emb_CAA65433_ (X96613) cytoplasmic ribosomal protein S7 [Podospora anserina]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22680                      | Seq. ID | OJ990405_01.9A01.C26 |
| Gene No. | 47170                      | Strand  | +                    |
| Start    | 2240                       | End     | 9819                 |
| Name     | OJ990405_01.9A01.C26.o3.gp | Method  | AAT/GAP              |
| Start    | 8827                       | End     | 9298                 |
| GI       | none                       | Score   | 885                  |
| Exons    | 8827..9298                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22680   | Seq. ID | OJ990405_01.9A01.C26 |
| Gene No.    | 47171   | Strand  | -                    |
| Start       | 3734  | End     | 3810                 |
| Name        | OJ990405_01.9A01.C26.o1.gp  | Method  | AAT/GAP              |
| Start       | 3734  | End     | 3810                 |
| GI          | 5867_1.R1084  | Score   | 97                   |
| Exons       | 3734..3810  |         |                      |
| GI Descrip. | '464986/sp P35132 UBC9_ARATH 5.0e-58 UBIQUITIN-CONJUGATING ENZYME E2-17 KD 9 (UBIQUITIN-PROTEIN LIGASE 9) (UBIQUITIN CARRIER PROTEIN 9) (UBCAT4B) >gi_421857_pir_S32674 ubiquitin--protein ligase (EC 6.3.2.19) UBC9 - Arabidopsis thaliana >gi_297884_emb_CAA78714_(Z14990) ubiquitin conjugating enzyme homolog [Arabidopsis thaliana] >gi_349211 (L00639) ubiquitin conjugating enzyme [Arabidopsis] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22680  | Seq. ID | OJ990405_01.9A01.C26 |
| Gene No. | 47172  | Strand  |                      |
| Start    | 5771   | End     | 6874                 |
| Name     | OJ990405_01.9A01.C26.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 5771   | End     | 6874                 |
| GI       | none   | Score   | 52                   |
| Exons    | 5771..5836, 5827..5946, 5828..5947, 5837..5947, 6579..6860, 6580..6873, 6580..6873, 6620..6874 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22680  | Seq. ID | OJ990405_01.9A01.C26 |
| Gene No. | 47172  | Strand  |                      |
| Start    | 5771   | End     | 6874                 |
| Name     | OJ990405_01.9A01.C26.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 5795   | End     | 6729                 |
| GI       | none   | Score   | 87                   |
| Exons    | 5795..5947, 5827..5946, 6579..6707, 6580..6729 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22680  | Seq. ID | OJ990405_01.9A01.C26 |
| Gene No. | 47173  | Strand  |                      |
| Start    | 7241   | End     | 8162                 |
| Name     | OJ990405_01.9A01.C26.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 7241   | End     | 8116                 |
| GI       | none   | Score   | 217                  |
| Exons    | 7241..7366, 7242..7367, 7473..7691, 7490..7732, 7664..7741, 7819..8004, 7820..8014, 7828..8007, 7871..8008, 8096..8116 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22680  | Seq. ID | OJ990405_01.9A01.C26 |
| Gene No. | 47173  | Strand  |                      |
| Start    | 7241   | End     | 8162                 |
| Name     | OJ990405_01.9A01.C26.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 7845   | End     | 8162                 |
| GI       | none   | Score   | 90                   |
| Exons    | 7845..8000, 7845..8000, 7846..8004, 7846..8007, 7871..8008, 8093..8161, 8099..8146, 8100..8162 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22680   | Seq. ID | OJ990405_01.9A01.C26 |
| Gene No. | 47174   | Strand  |                      |
| Start    | 8118  | End     | 9009                 |
| Name     | OJ990405_01.9A01.C26.o3.tm                                  | Method  | TBLASTX:Maize        |
| Start    | 8118  | End     | 9009                 |
| GI       | none  | Score   | 242                  |
| Exons    | 8118..8339, 8118..8336, 8573..8689, 8595..8690, 8839..8949, |         |                      |



8844..8945, 8941..9009, 8952..9002

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22681                      | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47175                      | Strand  | +                    |
| Start    | 1                          | End     | 108                  |
| Name     | OJ990405_01.9A01.C27.o1.gp | Method  | AAT/GAP              |
| Start    | 1                          | End     | 108                  |
| GI       | none                       | Score   | 204                  |
| Exons    | 1..108                     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22681                      | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47176                      | Strand  | +                    |
| Start    | 1200                       | End     | 1488                 |
| Name     | OJ990405_01.9A01.C27.o1.gs | Method  | GENSCAN              |
| Start    | 1200                       | End     | 1488                 |
| GI       | none                       | Score   | .61                  |
| Exons    | 1200..1269, 1346..1488     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22681                      | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47177                      | Strand  | +                    |
| Start    | 3626                       | End     | 4002                 |
| Name     | OJ990405_01.9A01.C27.o2.gp | Method  | AAT/GAP              |
| Start    | 3626                       | End     | 4002                 |
| GI       | none                       | Score   | 681                  |
| Exons    | 3626..4002                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22681                      | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47178                      | Strand  | -                    |
| Start    | 2414                       | End     | 2854                 |
| Name     | OJ990405_01.9A01.C27.o2.gs | Method  | GENSCAN              |
| Start    | 2414                       | End     | 2854                 |
| GI       | none                       | Score   | .72                  |
| Exons    | 2414..2607, 2692..2854     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22681  | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No.    | 47179  | Strand  | -                    |
| Start       | 2938   | End     | 6335                 |
| Name        | OJ990405_01.9A01.C27.o1.np   | Method  | AAT/NAP              |
| Start       | 2938   | End     | 6166                 |
| GI          | 464900   | Score   | 400                  |
| Exons       | 2938..3003, 3965..4542, 5848..6166   |         |                      |
| GI Descrip. | PUTATIVE KINASE-LIKE PROTEIN TMKL1 PRECURSOR<br>gi 539008 pir  S39476 kinase-like transmembrane protein TMKL1<br>precursor - Arabidopsis thaliana gi 313190 emb CAA51385 <br>(X72863) TMKL1 [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22681                      | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47179                      | Strand  | -                    |
| Start    | 2938                       | End     | 6335                 |
| Name     | OJ990405_01.9A01.C27.o3.gs | Method  | GENSCAN              |
| Start    | 3956                       | End     | 6058                 |
| GI       | none                       | Score   | .71                  |
| Exons    | 3956..4536, 5848..6058     |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22681 | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47179 | Strand  | -                    |
| Start    | 2938  | End     | 6335                 |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Name     | OJ990405_01.9A01.C27.ol.ts   | Method  | TBLASTX:Soybean      |
| Start    | 4010   | End     | 4535                 |
| GI       | none   | Score   | 182                  |
| Exons    | 4010..4048, 4079..4516, 4116..4535   |         |                      |
|          |  |         |                      |
| Seq. No. | 22681  | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47179  | Strand  | -                    |
| Start    | 2938   | End     | 6335                 |
| Name     | OJ990405_01.9A01.C27.ol.tc   | Method  | TBLASTX:Cress        |
| Start    | 4052   | End     | 6163                 |
| GI       | none   | Score   | 66                   |
| Exons    | 4052..4498, 4365..4484, 5852..6037, 6047..6163                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22681  | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47179  | Strand  | -                    |
| Start    | 2938   | End     | 6335                 |
| Name     | OJ990405_01.9A01.C27.ol.tm   | Method  | TBLASTX:Maize        |
| Start    | 4052   | End     | 4527                 |
| GI       | none   | Score   | 265                  |
| Exons    | 4052..4525, 4054..4524, 4055..4525, 4453..4527                                     |         |                      |
|          |  |         |                      |
| Seq. No. | 22681  | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47179  | Strand  | -                    |
| Start    | 2938   | End     | 6335                 |
| Name     | OJ990405_01.9A01.C27.ol.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4214   | End     | 4543                 |
| GI       | none   | Score   | 178                  |
| Exons    | 4214..4543   |         |                      |
|          |  |         |                      |
| Seq. No. | 22681  | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47179  | Strand  | -                    |
| Start    | 2938   | End     | 6335                 |
| Name     | OJ990405_01.9A01.C27.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 5842   | End     | 6166                 |
| GI       | none   | Score   | 125                  |
| Exons    | 5842..5880, 5843..5944, 5849..6007, 5850..5975, 5981..6163, 6015..6155, 6020..6166 |         |                      |
|          |  |         |                      |
| Seq. No. | 22681  | Seq. ID | OJ990405_01.9A01.C27 |
| Gene No. | 47179  | Strand  | -                    |
| Start    | 2938   | End     | 6335                 |
| Name     | OJ990405_01.9A01.C27.o3.gp   | Method  | AAT/GAP              |
| Start    | 6064   | End     | 6335                 |
| GI       | none   | Score   | 495                  |
| Exons    | 6064..6335   |         |                      |
|          |  |         |                      |
| Seq. No. | 22682  | Seq. ID | OJ990405_01.9A01.C28 |
| Gene No. | 47180  | Strand  | +                    |
| Start    | 936  | End     | 2455                 |
| Name     | OJ990405_01.9A01.C28.ol.gs   | Method  | GENSCAN              |
| Start    | 936  | End     | 2455                 |
| GI       | none   | Score   | .56                  |
| Exons    | 936..955, 1001..1135, 1842..2084, 2139..2310, 2438..2455                           |         |                      |
|          |  |         |                      |
| Seq. No. | 22682  | Seq. ID | OJ990405_01.9A01.C28 |
| Gene No. | 47181  | Strand  | +                    |
| Start    | 13432  | End     | 15487                |

|       |  |        |         |
|-------|--|--------|---------|
| Name  | OJ990405_01.9A01.C28.o3.gs               | Method | GENSCAN |
| Start | 13432                                    | End    | 15453   |
| GI    | none                                     | Score  | .59     |
| Exons | 13432..13520, 13618..13981, 15250..15453 |        |         |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22682  | Seq. ID | OJ990405_01.9A01.C28 |
| Gene No.    | 47181  | Strand  | +                    |
| Start       | 13432  | End     | 15487                |
| Name        | OJ990405_01.9A01.C28.o2.np   | Method  | AAT/NAP              |
| Start       | 13435  | End     | 15487                |
| GI          | 5541721  | Score   | 484                  |
| Exons       | 13435..13520, 13618..13672, 13733..13981, 15250..15487                   |         |                      |
| GI Descrip. | (AL096856) cell division cycle protein 23 homolog [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22682  | Seq. ID | OJ990405_01.9A01.C28 |
| Gene No. | 47182  | Strand  | -                    |
| Start    | 3369   | End     | 12052                |
| Name     | OJ990405_01.9A01.C28.o2.gs   | Method  | GENSCAN              |
| Start    | 3369   | End     | 12013                |
| GI       | none   | Score   | .6                   |
| Exons    | 3369..4466, 6577..6708, 7478..7709, 8506..8601, 9075..9159, 9266..9292, 9381..9639, 10183..10275, 10445..10537, 10646..10813, 11023..11118, 11918..12013 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22682                      | Seq. ID | OJ990405_01.9A01.C28 |
| Gene No. | 47182                      | Strand  | -                    |
| Start    | 3369                       | End     | 12052                |
| Name     | OJ990405_01.9A01.C28.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 6560                       | End     | 6711                 |
| GI       | none                       | Score   | 175                  |
| Exons    | 6560..6709, 6571..6711     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22682  | Seq. ID | OJ990405_01.9A01.C28 |
| Gene No. | 47182  | Strand  | -                    |
| Start    | 3369   | End     | 12052                |
| Name     | OJ990405_01.9A01.C28.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 6816   | End     | 8719                 |
| GI       | none   | Score   | 75                   |
| Exons    | 6816..6854, 6817..6858, 6817..6858, 7310..7459, 7317..7460, 7319..7486, 7428..7463, 7465..7518, 7466..7549, 7469..7513, 7470..7526, 7521..7712, 7522..7704, 7523..7711, 7524..7712, 7781..7882, 7782..7880, 8502..8669, 8506..8661, 8540..8719 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22682   | Seq. ID | OJ990405_01.9A01.C28 |
| Gene No.    | 47182   | Strand  | -                    |
| Start       | 3369  | End     | 12052                |
| Name        | OJ990405_01.9A01.C28.o1.np  | Method  | AAT/NAP              |
| Start       | 7296  | End     | 10552                |
| GI          | 6572330   | Score   | 270                  |
| Exons       | 7296..7598, 7725..7884, 8531..8655, 9075..9159, 9567..9639, 10183..10256, 10402..10552                                  |         |                      |
| GI Descrip. | (AL096766) dA59H18.2 (novel protein similar to human, mouse, yeast, worm and plant (predicted) proteins) [Homo sapiens] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22682 | Seq. ID | OJ990405_01.9A01.C28 |
| Gene No. | 47182 | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 3369   | End    | 12052         |
| Name  | OJ990405_01.9A01.C28.o5.tm   | Method | TBLASTX:Maize |
| Start | 9463   | End    | 10266         |
| GI    | none   | Score  | 130           |
| Exons | 9463..9639, 9548..9640, 10181..10258, 10182..10259, 10183..10266, 10187..10258 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22682  | Seq. ID | OJ990405_01.9A01.C28 |
| Gene No. | 47182  | Strand  | -                    |
| Start    | 3369   | End     | 12052                |
| Name     | OJ990405_01.9A01.C28.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 10646  | End     | 12052                |
| GI       | none   | Score   | 157                  |
| Exons    | 10646..10819, 10647..10814, 10954..11049, 10957..11118, 10961..11119, 10961..11119, 10962..11120, 11921..12013, 11921..12052 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22682  | Seq. ID | OJ990405_01.9A01.C28 |
| Gene No. | 47183  | Strand  |                      |
| Start    | 13778  | End     | 15350                |
| Name     | OJ990405_01.9A01.C28.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 13778  | End     | 15350                |
| GI       | none   | Score   | 83                   |
| Exons    | 13778..13834, 13807..13833, 13831..13941, 13832..13960, 15294..15350 |         |                      |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22683                     | Seq. ID | OJ990505_05.9A11.C2 |
| Gene No. | 47184                     | Strand  |                     |
| Start    | 108                       | End     | 458                 |
| Name     | OJ990505_05.9A11.C2.o1.tm | Method  | TBLASTX:Maize       |
| Start    | 108                       | End     | 413                 |
| GI       | none                      | Score   | 243                 |
| Exons    | 108..413                  |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22683                     | Seq. ID | OJ990505_05.9A11.C2 |
| Gene No. | 47184                     | Strand  |                     |
| Start    | 108                       | End     | 458                 |
| Name     | OJ990505_05.9A11.C2.o1.tw | Method  | TBLASTX:Wheat       |
| Start    | 108                       | End     | 458                 |
| GI       | none                      | Score   | 318                 |
| Exons    | 108..458                  |         |                     |

|          |                              |         |                     |
|----------|------------------------------|---------|---------------------|
| Seq. No. | 22683                        | Seq. ID | OJ990505_05.9A11.C2 |
| Gene No. | 47185                        | Strand  |                     |
| Start    | 627                          | End     | 941                 |
| Name     | OJ990505_05.9A11.C2.o3.tw    | Method  | TBLASTX:Wheat       |
| Start    | 627                          | End     | 941                 |
| GI       | none                         | Score   | 59                  |
| Exons    | 627..671, 744..941, 791..931 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22683  | Seq. ID | OJ990505_05.9A11.C2 |
| Gene No. | 47186  | Strand  |                     |
| Start    | 969  | End     | 1346                |
| Name     | OJ990505_05.9A11.C2.o2.tw                    | Method  | TBLASTX:Wheat       |
| Start    | 969  | End     | 1325                |
| GI       | none   | Score   | 128                 |
| Exons    | 969..1133, 995..1096, 1158..1325, 1196..1294 |         |                     |

Seq. No. 22683  
Gene No. 47186  
Start 969  
Name OJ990505\_05.9A11.C2.o2.tm  
Start 1149  
GI none  
Exons 1149..1346, 1187..1294

Seq. ID OJ990505\_05.9A11.C2  
Strand  
End 1346  
Method TBLASTX:Maize  
End 1346  
Score 196

Seq. No. 22684  
Gene No. 47187  
Start 3  
Name OJ990505\_05.9A11.C13.o2.tm  
Start 3  
GI none  
Exons 3..188, 4..198, 4..198

Seq. ID OJ990505\_05.9A11.C13  
Strand  
End 198  
Method TBLASTX:Maize  
End 198  
Score 229

Seq. No. 22684  
Gene No. 47187  
Start 3  
Name OJ990505\_05.9A11.C13.o2.tw  
Start 3  
GI none  
Exons 3..167, 4..174

Seq. ID OJ990505\_05.9A11.C13  
Strand  
End 198  
Method TBLASTX:Wheat  
End 174  
Score 243

Seq. No. 22684  
Gene No. 47188  
Start 225  
Name OJ990505\_05.9A11.C13.o1.tm  
Start 225  
GI none  
Exons 225..590, 226..609

Seq. ID OJ990505\_05.9A11.C13  
Strand  
End 732  
Method TBLASTX:Maize  
End 609  
Score 361

Seq. No. 22684  
Gene No. 47188  
Start 225  
Name OJ990505\_05.9A11.C13.o1.tw  
Start 282  
GI none  
Exons 282..707, 283..702

Seq. ID OJ990505\_05.9A11.C13  
Strand  
End 732  
Method TBLASTX:Wheat  
End 707  
Score 493

Seq. No. 22684  
Gene No. 47188  
Start 225  
Name OJ990505\_05.9A11.C13.o1.ts  
Start 361  
GI none  
Exons 361..732, 378..521

Seq. ID OJ990505\_05.9A11.C13  
Strand  
End 732  
Method TBLASTX:Soybean  
End 732  
Score 279

Seq. No. 22685  
Gene No. 47189  
Start 135  
Name OJ990505\_05.9A11.C14.o1.tw  
Start 135  
GI none  
Exons 135..431, 167..424, 181..432, 281..451, 513..587, 617..739, 618..743

Seq. ID OJ990505\_05.9A11.C14  
Strand  
End 743  
Method TBLASTX:Wheat  
End 743  
Score 277

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22686   | Seq. ID | OJ990505_05.9A11.C15 |
| Gene No.    | 47190   | Strand  | -                    |
| Start       | 2136  | End     | 2273                 |
| Name        | OJ990505_05.9A11.C15.o1.gp  | Method  | AAT/GAP              |
| Start       | 2136  | End     | 2273                 |
| GI          | LIB3474-009-P1-K1-F11   | Score   | 232                  |
| Exons       | 2136..2273  |         |                      |
| GI Descrip. | '4455244/emb CAB36743.1  6.0e-11 (AL035523) MtN3-like protein [Arabidopsis thaliana]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22687                      | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47191                      | Strand  |                      |
| Start    | 484                        | End     | 886                  |
| Name     | OJ990505_05.9A11.C16.o7.tw | Method  | TBLASTX:Wheat        |
| Start    | 484                        | End     | 886                  |
| GI       | none                       | Score   | 284                  |
| Exons    | 484..753, 485..886         |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22687  | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47192  | Strand  |                      |
| Start    | 1464   | End     | 2261                 |
| Name     | OJ990505_05.9A11.C16.o1.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 1464   | End     | 2261                 |
| GI       | none   | Score   | 145                  |
| Exons    | 1464..1640, 1685..1921, 1689..1919, 1968..2261, 2096..2257 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22687                      | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47193                      | Strand  |                      |
| Start    | 2181                       | End     | 3386                 |
| Name     | OJ990505_05.9A11.C16.o3.ts | Method  | TBLASTX:Soybean      |
| Start    | 2181                       | End     | 2546                 |
| GI       | none                       | Score   | 119                  |
| Exons    | 2181..2405, 2412..2546     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22687                              | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47193                              | Strand  |                      |
| Start    | 2181                               | End     | 3386                 |
| Name     | OJ990505_05.9A11.C16.o8.tw         | Method  | TBLASTX:Wheat        |
| Start    | 2262                               | End     | 2495                 |
| GI       | none                               | Score   | 261                  |
| Exons    | 2262..2495, 2282..2491, 2283..2495 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22687                      | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47193                      | Strand  |                      |
| Start    | 2181                       | End     | 3386                 |
| Name     | OJ990505_05.9A11.C16.o2.tm | Method  | TBLASTX:Maize        |
| Start    | 2271                       | End     | 2627                 |
| GI       | none                       | Score   | 355                  |
| Exons    | 2271..2627, 2312..2617     |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22687                      | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47193                      | Strand  |                      |
| Start    | 2181                       | End     | 3386                 |
| Name     | OJ990505_05.9A11.C16.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 2496                       | End     | 2915                 |
| GI       | none                       | Score   | 471                  |

Exons 2496..2915, 2496..2720, 2498..2914

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22687                              | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47193                              | Strand  |                      |
| Start    | 2181                               | End     | 3386                 |
| Name     | OJ990505_05.9A11.C16.o1.ts         | Method  | TBLASTX:Soybean      |
| Start    | 2790                               | End     | 3188                 |
| GI       | none                               | Score   | 217                  |
| Exons    | 2790..3032, 2807..2950, 3021..3188 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22687  | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47193  | Strand  |                      |
| Start    | 2181   | End     | 3386                 |
| Name     | OJ990505_05.9A11.C16.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 2858   | End     | 3299                 |
| GI       | none   | Score   | 193                  |
| Exons    | 2858..3031, 2859..3038, 3030..3110, 3131..3262, 3132..3275, 3273..3299 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22687  | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47193  | Strand  |                      |
| Start    | 2181   | End     | 3386                 |
| Name     | OJ990505_05.9A11.C16.o5.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 2960   | End     | 3386                 |
| GI       | none   | Score   | 76                   |
| Exons    | 2960..3037, 2961..3038, 3030..3386, 3101..3385 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22687                              | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47194                              | Strand  |                      |
| Start    | 3414                               | End     | 3920                 |
| Name     | OJ990505_05.9A11.C16.o2.ts         | Method  | TBLASTX:Soybean      |
| Start    | 3414                               | End     | 3793                 |
| GI       | none                               | Score   | 62                   |
| Exons    | 3414..3488, 3485..3793, 3549..3791 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22687                              | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47194                              | Strand  |                      |
| Start    | 3414                               | End     | 3920                 |
| Name     | OJ990505_05.9A11.C16.o6.tw         | Method  | TBLASTX:Wheat        |
| Start    | 3423                               | End     | 3838                 |
| GI       | none                               | Score   | 74                   |
| Exons    | 3423..3488, 3425..3838, 3489..3827 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22687                      | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47194                      | Strand  |                      |
| Start    | 3414                       | End     | 3920                 |
| Name     | OJ990505_05.9A11.C16.o5.tm | Method  | TBLASTX:Maize        |
| Start    | 3666                       | End     | 3920                 |
| GI       | none                       | Score   | 190                  |
| Exons    | 3666..3920                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22687                      | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47195                      | Strand  |                      |
| Start    | 4148                       | End     | 4541                 |
| Name     | OJ990505_05.9A11.C16.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 4148                       | End     | 4511                 |
| GI       | none                       | Score   | 412                  |

Exons 4148..4456, 4149..4472, 4169..4492, 4464..4511

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22687                              | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47195                              | Strand  |                      |
| Start    | 4148                               | End     | 4541                 |
| Name     | OJ990505_05.9A11.C16.o3.tw         | Method  | TBLASTX:Wheat        |
| Start    | 4154                               | End     | 4541                 |
| GI       | none                               | Score   | 392                  |
| Exons    | 4154..4465, 4155..4541, 4350..4541 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22687  | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47196  | Strand  |                      |
| Start    | 4613   | End     | 5270                 |
| Name     | OJ990505_05.9A11.C16.o6.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 4613   | End     | 4886                 |
| GI       | none   | Score   | 95                   |
| Exons    | 4613..4720, 4614..4712, 4703..4777, 4707..4790, 4800..4886 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22687  | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47196  | Strand  |                      |
| Start    | 4613   | End     | 5270                 |
| Name     | OJ990505_05.9A11.C16.o4.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 4656   | End     | 5270                 |
| GI       | none   | Score   | 267                  |
| Exons    | 4656..4934, 4676..4762, 4811..4918, 4989..5114, 5133..5270 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22687  | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47196  | Strand  |                      |
| Start    | 4613   | End     | 5270                 |
| Name     | OJ990505_05.9A11.C16.o4.tm                     | Method  | TBLASTX:Maize        |
| Start    | 4998   | End     | 5233                 |
| GI       | none   | Score   | 150                  |
| Exons    | 4998..5150, 5099..5149, 5129..5233, 5133..5231 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22687                      | Seq. ID | OJ990505_05.9A11.C16 |
| Gene No. | 47197                      | Strand  |                      |
| Start    | 8122                       | End     | 8412                 |
| Name     | OJ990505_05.9A11.C16.o9.tw | Method  | TBLASTX:Wheat        |
| Start    | 8122                       | End     | 8412                 |
| GI       | none                       | Score   | 57                   |
| Exons    | 8122..8412, 8159..8230     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22688  | Seq. ID | OJ990505_05.9A11.C17 |
| Gene No. | 47198  | Strand  |                      |
| Start    | 480  | End     | 947                  |
| Name     | OJ990505_05.9A11.C17.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 480  | End     | 947                  |
| GI       | none   | Score   | 35                   |
| Exons    | 480..497, 531..626, 541..621, 572..631, 626..892, 627..887, 885..947 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22689                      | Seq. ID | OJ990505_05.9A11.C23 |
| Gene No. | 47199                      | Strand  |                      |
| Start    | 232                        | End     | 459                  |
| Name     | OJ990505_05.9A11.C23.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 232                        | End     | 459                  |
| GI       | none                       | Score   | 154                  |



Exons 232..459, 233..454, 316..456

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22690   | Seq. ID | OJ990505_05.9A11.C27 |
| Gene No.    | 47200   | Strand  | +                    |
| Start       | 1   | End     | 1092                 |
| Name        | OJ990505_05.9A11.C27.o1.gp  | Method  | AAT/GAP              |
| Start       | 1   | End     | 1091                 |
| GI          | 342_1.R1084   | Score   | 1787                 |
| Exons       | 1..1091   |         |                      |
| GI Descrip. | '4574406/gb AAD24042.1  0.0e+00 (AF121139) RIM2 protein [Oryza sativa]' |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22690   | Seq. ID | OJ990505_05.9A11.C27 |
| Gene No. | 47200   | Strand  | +                    |
| Start    | 1   | End     | 1092                 |
| Name     | OJ990505_05.9A11.C27.o2.tw                                | Method  | TBLASTX:Wheat        |
| Start    | 82  | End     | 478                  |
| GI       | none  | Score   | 92                   |
| Exons    | 82..234, 119..220, 217..468, 225..467, 228..470, 236..478 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22690                        | Seq. ID | OJ990505_05.9A11.C27 |
| Gene No. | 47200                        | Strand  | +                    |
| Start    | 1                            | End     | 1092                 |
| Name     | OJ990505_05.9A11.C27.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 250                          | End     | 540                  |
| GI       | none                         | Score   | 225                  |
| Exons    | 250..468, 258..464, 475..540 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22690                                  | Seq. ID | OJ990505_05.9A11.C27 |
| Gene No. | 47200                                  | Strand  | +                    |
| Start    | 1                                      | End     | 1092                 |
| Name     | OJ990505_05.9A11.C27.o2.ts             | Method  | TBLASTX:Soybean      |
| Start    | 559                                    | End     | 833                  |
| GI       | none                                   | Score   | 155                  |
| Exons    | 559..771, 564..767, 568..804, 777..833 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22690                                  | Seq. ID | OJ990505_05.9A11.C27 |
| Gene No. | 47200                                  | Strand  | +                    |
| Start    | 1                                      | End     | 1092                 |
| Name     | OJ990505_05.9A11.C27.o1.tc             | Method  | TBLASTX:Cress        |
| Start    | 561                                    | End     | 914                  |
| GI       | none                                   | Score   | 161                  |
| Exons    | 561..725, 568..789, 777..914, 782..895 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22690   | Seq. ID | OJ990505_05.9A11.C27 |
| Gene No. | 47200   | Strand  | +                    |
| Start    | 1   | End     | 1092                 |
| Name     | OJ990505_05.9A11.C27.o1.tw  | Method  | TBLASTX:Wheat        |
| Start    | 697   | End     | 1092                 |
| GI       | none  | Score   | 68                   |
| Exons    | 697..753, 705..749, 739..846, 751..789, 777..860, 785..856, 864..962, 869..961, 872..964, 942..1088, 964..1092, 965..1087 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22690                      | Seq. ID | OJ990505_05.9A11.C27 |
| Gene No. | 47200                      | Strand  | +                    |
| Start    | 1                          | End     | 1092                 |
| Name     | OJ990505_05.9A11.C27.o1.tm | Method  | TBLASTX:Maize        |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Start       | 771  | End     | 1088                 |
| GI          | none   | Score   | 230                  |
| Exons       | 771..1001, 812..1000, 1011..1088   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22691  | Seq. ID | OJ990505_05.9A11.C28 |
| Gene No.    | 47201  | Strand  | +                    |
| Start       | 5860   | End     | 6353                 |
| Name        | OJ990505_05.9A11.C28.o1.tw   | Method  | TBLASTX:Wheat        |
| Start       | 1829   | End     | 2230                 |
| GI          | none   | Score   | 216                  |
| Exons       | 1829..2065, 1829..2023, 1930..2073, 2060..2230, 2113..2229   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22691  | Seq. ID | OJ990505_05.9A11.C28 |
| Gene No.    | 47201  | Strand  | +                    |
| Start       | 5860   | End     | 6353                 |
| Name        | OJ990505_05.9A11.C28.o3.tw   | Method  | TBLASTX:Wheat        |
| Start       | 2231   | End     | 2924                 |
| GI          | none   | Score   | 60                   |
| Exons       | 2231..2311, 2333..2494, 2552..2623, 2706..2924   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22691  | Seq. ID | OJ990505_05.9A11.C28 |
| Gene No.    | 47201  | Strand  | +                    |
| Start       | 5860   | End     | 6353                 |
| Name        | OJ990505_05.9A11.C28.o2.tw   | Method  | TBLASTX:Wheat        |
| Start       | 3803   | End     | 4162                 |
| GI          | none   | Score   | 142                  |
| Exons       | 3803..4003, 3815..4000, 4081..4155, 4082..4162   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22691  | Seq. ID | OJ990505_05.9A11.C28 |
| Gene No.    | 47201  | Strand  | +                    |
| Start       | 5860   | End     | 6353                 |
| Name        | OJ990505_05.9A11.C28.o1.gp   | Method  | AAT/GAP              |
| Start       | 5860   | End     | 6353                 |
| GI          | 576771   | Score   | 824                  |
| Exons       | 5860..6116, 6143..6353   |         |                      |
| GI Descrip. | 576771/gb U16256 OSU16256 0.0e+00 Oryza sativa cone SR1<br>sucrose-regulated mRNA, 3'-end sequence |         |                      |
|             |  |         |                      |
| Seq. No.    | 22692  | Seq. ID | OJ990505_05.9A11.C32 |
| Gene No.    | 47202  | Strand  |                      |
| Start       | 4064   | End     | 5967                 |
| Name        | OJ990505_05.9A11.C32.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 4064   | End     | 5967                 |
| GI          | none   | Score   | 69                   |
| Exons       | 4064..4150, 4067..4150, 4169..4240, 4180..4236, 4741..4908,<br>4744..4944, 4749..4946, 5917..5967  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22693  | Seq. ID | OJ990505_05.9A11.C33 |
| Gene No.    | 47203  | Strand  |                      |
| Start       | 1590   | End     | 2042                 |
| Name        | OJ990505_05.9A11.C33.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 1590   | End     | 2042                 |
| GI          | none   | Score   | 198                  |
| Exons       | 1590..1763, 1592..1762, 1722..1763, 1910..2041, 1911..2039,<br>1911..2042, 1912..2040              |         |                      |
|             |  |         |                      |
| Seq. No.    | 22694  | Seq. ID | OJ990505_05.9A11.C34 |

|             |   |        |         |
|-------------|---|--------|---------|
| Gene No.    | 47204   | Strand | +       |
| Start       | 1226  | End    | 1419    |
| Name        | OJ990505_05.9A11.C34.o1.gp  | Method | AAT/GAP |
| Start       | 1226  | End    | 1419    |
| GI          | LIB3433-046-P1-K1-D5  | Score  | 255     |
| Exons       | 1226..1419  |        |         |
| GI Descrip. | '5441872/dbj AP000366.1 AP000366 2.0e-21 Oryza sativa genomic DNA, chromosome 2, clone:P0437H03 (contig a)' |        |         |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22695                      | Seq. ID | OJ990505_05.9A11.C37 |
| Gene No. | 47205                      | Strand  |                      |
| Start    | 1884                       | End     | 2174                 |
| Name     | OJ990505_05.9A11.C37.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 1884                       | End     | 2174                 |
| GI       | none                       | Score   | 208                  |
| Exons    | 1884..2174                 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22696  | Seq. ID | OJ990505_05.9A11.C38 |
| Gene No. | 47206  | Strand  |                      |
| Start    | 111  | End     | 1025                 |
| Name     | OJ990505_05.9A11.C38.o1.tm                                   | Method  | TBLASTX:Maize        |
| Start    | 111  | End     | 1025                 |
| GI       | none   | Score   | 98                   |
| Exons    | 111..230, 126..227, 143..235, 765..902, 767..1024, 987..1025 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22697                      | Seq. ID | OJ990505_05.9A11.C40 |
| Gene No. | 47207                      | Strand  |                      |
| Start    | 1                          | End     | 341                  |
| Name     | OJ990505_05.9A11.C40.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 1                          | End     | 260                  |
| GI       | none                       | Score   | 134                  |
| Exons    | 1..102, 3..101, 102..260   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22697                      | Seq. ID | OJ990505_05.9A11.C40 |
| Gene No. | 47207                      | Strand  |                      |
| Start    | 1                          | End     | 341                  |
| Name     | OJ990505_05.9A11.C40.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 1                          | End     | 341                  |
| GI       | none                       | Score   | 86                   |
| Exons    | 1..102, 102..341           |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22697                              | Seq. ID | OJ990505_05.9A11.C40 |
| Gene No. | 47207                              | Strand  |                      |
| Start    | 1                                  | End     | 341                  |
| Name     | OJ990505_05.9A11.C40.o4.tw         | Method  | TBLASTX:Wheat        |
| Start    | 3                                  | End     | 272                  |
| GI       | none                               | Score   | 143                  |
| Exons    | 3..110, 4..102, 102..272, 108..266 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22697                                  | Seq. ID | OJ990505_05.9A11.C40 |
| Gene No. | 47208                                  | Strand  |                      |
| Start    | 276                                    | End     | 701                  |
| Name     | OJ990505_05.9A11.C40.o3.tw             | Method  | TBLASTX:Wheat        |
| Start    | 276                                    | End     | 701                  |
| GI       | none                                   | Score   | 594                  |
| Exons    | 276..701, 278..340, 352..534, 365..694 |         |                      |

Seq. No. 22697  
Gene No. 47208  
Start 276  
Name OJ990505\_05.9A11.C40.o3.ts  
Start 282  
GI none  
Exons 282..530

Seq. ID OJ990505\_05.9A11.C40  
Strand  
End 701  
Method TBLASTX:Soybean  
End 530  
Score 201

Seq. No. 22697  
Gene No. 47208  
Start 276  
Name OJ990505\_05.9A11.C40.o2.tm  
Start 348  
GI none  
Exons 348..701, 368..694

Seq. ID OJ990505\_05.9A11.C40  
Strand  
End 701  
Method TBLASTX:Maize  
End 701  
Score 459

Seq. No. 22697  
Gene No. 47209  
Start 776  
Name OJ990505\_05.9A11.C40.o2.tw  
Start 776  
GI none  
Exons 776..1270, 916..1266

Seq. ID OJ990505\_05.9A11.C40  
Strand  
End 2236  
Method TBLASTX:Wheat  
End 1270  
Score 602

Seq. No. 22697  
Gene No. 47209  
Start 776  
Name OJ990505\_05.9A11.C40.o1.tc  
Start 968  
GI none  
Exons 968..1150, 1151..1294, 1153..1293

Seq. ID OJ990505\_05.9A11.C40  
Strand  
End 2236  
Method TBLASTX:Cress  
End 1294  
Score 90

Seq. No. 22697  
Gene No. 47209  
Start 776  
Name OJ990505\_05.9A11.C40.o1.ts  
Start 1058  
GI none  
Exons 1058..1318, 1069..1317

Seq. ID OJ990505\_05.9A11.C40  
Strand  
End 2236  
Method TBLASTX:Soybean  
End 1318  
Score 301

Seq. No. 22697  
Gene No. 47209  
Start 776  
Name OJ990505\_05.9A11.C40.o3.tm  
Start 1116  
GI none  
Exons 1116..1217, 1117..1404, 1118..1408, 1250..1405

Seq. ID OJ990505\_05.9A11.C40  
Strand  
End 2236  
Method TBLASTX:Maize  
End 1408  
Score 90

Seq. No. 22697  
Gene No. 47209  
Start 776  
Name OJ990505\_05.9A11.C40.o1.tw  
Start 1277  
GI none  
Exons 1277..1903, 1279..1785, 1280..1894, 1843..1902

Seq. ID OJ990505\_05.9A11.C40  
Strand  
End 2236  
Method TBLASTX:Wheat  
End 1903  
Score 718

Seq. No. 22697

Seq. ID OJ990505\_05.9A11.C40

|          |  |        |               |
|----------|--|--------|---------------|
| Gene No. | 47209  | Strand |               |
| Start    | 776  | End    | 2236          |
| Name     | OJ990505_05.9A11.C40.o1.tm                                 | Method | TBLASTX:Maize |
| Start    | 1456   | End    | 2041          |
| GI       | none   | Score  | 224           |
| Exons    | 1456..1611, 1457..1618, 1615..1788, 1616..2041, 1843..2040 |        |               |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22697                              | Seq. ID | OJ990505_05.9A11.C40 |
| Gene No. | 47209                              | Strand  |                      |
| Start    | 776                                | End     | 2236                 |
| Name     | OJ990505_05.9A11.C40.o5.tw         | Method  | TBLASTX:Wheat        |
| Start    | 1903                               | End     | 2236                 |
| GI       | none                               | Score   | 313                  |
| Exons    | 1903..2184, 1904..2236, 2054..2185 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22698                                      | Seq. ID | OJ990505_05.9A11.C46 |
| Gene No. | 47210                                      | Strand  |                      |
| Start    | 1  | End     | 381                  |
| Name     | OJ990505_05.9A11.C46.o1.tm                 | Method  | TBLASTX:Maize        |
| Start    | 1  | End     | 351                  |
| GI       | none                                       | Score   | 399                  |
| Exons    | 1..312, 9..332, 9..296, 303..350, 304..351 |         |                      |

|          |                                  |         |                      |
|----------|----------------------------------|---------|----------------------|
| Seq. No. | 22698                            | Seq. ID | OJ990505_05.9A11.C46 |
| Gene No. | 47210                            | Strand  |                      |
| Start    | 1                                | End     | 381                  |
| Name     | OJ990505_05.9A11.C46.o1.tw       | Method  | TBLASTX:Wheat        |
| Start    | 1                                | End     | 381                  |
| GI       | none                             | Score   | 383                  |
| Exons    | 1..381, 1..126, 3..305, 190..381 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22698                      | Seq. ID | OJ990505_05.9A11.C46 |
| Gene No. | 47211                      | Strand  |                      |
| Start    | 412                        | End     | 660                  |
| Name     | OJ990505_05.9A11.C46.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 412                        | End     | 660                  |
| GI       | none                       | Score   | 208                  |
| Exons    | 412..660, 444..653         |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22699                        | Seq. ID | OJ990505_05.9A11.C49 |
| Gene No. | 47212                        | Strand  |                      |
| Start    | 173                          | End     | 495                  |
| Name     | OJ990505_05.9A11.C49.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 173                          | End     | 452                  |
| GI       | none                         | Score   | 70                   |
| Exons    | 173..349, 189..290, 333..452 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22699  | Seq. ID | OJ990505_05.9A11.C49 |
| Gene No. | 47212  | Strand  |                      |
| Start    | 173  | End     | 495                  |
| Name     | OJ990505_05.9A11.C49.o3.tm                       | Method  | TBLASTX:Maize        |
| Start    | 221  | End     | 495                  |
| GI       | none   | Score   | 61                   |
| Exons    | 221..307, 324..401, 331..405, 396..494, 397..495 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22699 | Seq. ID | OJ990505_05.9A11.C49 |
| Gene No. | 47213 | Strand  |                      |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 566                                    | End    | 959           |
| Name  | OJ990505_05.9A11.C49.o1.tw             | Method | TBLASTX:Wheat |
| Start | 566                                    | End    | 954           |
| GI    | none                                   | Score  | 108           |
| Exons | 566..703, 567..752, 567..953, 643..954 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22699  | Seq. ID | OJ990505_05.9A11.C49 |
| Gene No. | 47213  | Strand  |                      |
| Start    | 566  | End     | 959                  |
| Name     | OJ990505_05.9A11.C49.o1.tm                       | Method  | TBLASTX:Maize        |
| Start    | 597  | End     | 959                  |
| GI       | none   | Score   | 67                   |
| Exons    | 597..644, 598..645, 625..939, 636..959, 649..939 |         |                      |

|          |                                   |         |                      |
|----------|-----------------------------------|---------|----------------------|
| Seq. No. | 22699                             | Seq. ID | OJ990505_05.9A11.C49 |
| Gene No. | 47214                             | Strand  |                      |
| Start    | 957                               | End     | 1256                 |
| Name     | OJ990505_05.9A11.C49.o4.tw        | Method  | TBLASTX:Wheat        |
| Start    | 957                               | End     | 1256                 |
| GI       | none                              | Score   | 47                   |
| Exons    | 957..1097, 1122..1256, 1123..1224 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22699                      | Seq. ID | OJ990505_05.9A11.C49 |
| Gene No. | 47215                      | Strand  |                      |
| Start    | 1272                       | End     | 1703                 |
| Name     | OJ990505_05.9A11.C49.o2.tw | Method  | TBLASTX:Wheat        |
| Start    | 1272                       | End     | 1694                 |
| GI       | none                       | Score   | 268                  |
| Exons    | 1272..1694, 1282..1686     |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22699                              | Seq. ID | OJ990505_05.9A11.C49 |
| Gene No. | 47215                              | Strand  |                      |
| Start    | 1272                               | End     | 1703                 |
| Name     | OJ990505_05.9A11.C49.o1.ts         | Method  | TBLASTX:Soybean      |
| Start    | 1315                               | End     | 1703                 |
| GI       | none                               | Score   | 163                  |
| Exons    | 1315..1695, 1317..1559, 1599..1703 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22699  | Seq. ID | OJ990505_05.9A11.C49 |
| Gene No. | 47215  | Strand  |                      |
| Start    | 1272   | End     | 1703                 |
| Name     | OJ990505_05.9A11.C49.o2.tm                     | Method  | TBLASTX:Maize        |
| Start    | 1368   | End     | 1641                 |
| GI       | none   | Score   | 60                   |
| Exons    | 1368..1466, 1369..1434, 1470..1640, 1471..1641 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22700                              | Seq. ID | OJ990505_05.9A11.C50 |
| Gene No. | 47216                              | Strand  |                      |
| Start    | 2200                               | End     | 2379                 |
| Name     | OJ990505_05.9A11.C50.o1.tc         | Method  | TBLASTX:Cress        |
| Start    | 2200                               | End     | 2379                 |
| GI       | none                               | Score   | 232                  |
| Exons    | 2200..2364, 2201..2365, 2227..2379 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22700 | Seq. ID | OJ990505_05.9A11.C50 |
| Gene No. | 47216 | Strand  |                      |
| Start    | 2200  | End     | 2379                 |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Name        | OJ990505_05.9A11.C50.ol.ts  | Method  | TBLASTX:Soybean      |
| Start       | 2200  | End     | 2365                 |
| GI          | none  | Score   | 231                  |
| Exons       | 2200..2364, 2201..2365  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22700   | Seq. ID | OJ990505_05.9A11.C50 |
| Gene No.    | 47216   | Strand  |                      |
| Start       | 2200  | End     | 2379                 |
| Name        | OJ990505_05.9A11.C50.ol.tm  | Method  | TBLASTX:Maize        |
| Start       | 2200  | End     | 2366                 |
| GI          | none  | Score   | 250                  |
| Exons       | 2200..2364, 2201..2365, 2265..2366  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22701   | Seq. ID | OJ990505_05.9A11.C51 |
| Gene No.    | 47217   | Strand  | +                    |
| Start       | 2638  | End     | 3037                 |
| Name        | OJ990505_05.9A11.C51.ol.gp  | Method  | AAT/GAP              |
| Start       | 2638  | End     | 3037                 |
| GI          | 29822_1.R1084   | Score   | 750                  |
| Exons       | 2638..3037  |         |                      |
| GI Descrip. | '4176420/dbj BAA37167  2.0e-11 (AB008097) cytochrome P450 [Arabidopsis thaliana]'                                       |         |                      |
|             |   |         |                      |
| Seq. No.    | 22702   | Seq. ID | OJ990505_05.9A11.C52 |
| Gene No.    | 47218   | Strand  | +                    |
| Start       | 2824  | End     | 4437                 |
| Name        | OJ990505_05.9A11.C52.ol.tc  | Method  | TBLASTX:Cress        |
| Start       | 1749  | End     | 2217                 |
| GI          | none  | Score   | 236                  |
| Exons       | 1749..1973, 1775..1921, 1785..1976, 2064..2153, 2069..2155, 2160..2216, 2170..2217                                      |         |                      |
|             |   |         |                      |
| Seq. No.    | 22702   | Seq. ID | OJ990505_05.9A11.C52 |
| Gene No.    | 47218   | Strand  | +                    |
| Start       | 2824  | End     | 4437                 |
| Name        | OJ990505_05.9A11.C52.ol.tm  | Method  | TBLASTX:Maize        |
| Start       | 1776  | End     | 2223                 |
| GI          | none  | Score   | 212                  |
| Exons       | 1776..1922, 1784..1918, 1786..1941, 1899..1973, 2064..2177, 2068..2223, 2069..2221                                      |         |                      |
|             |   |         |                      |
| Seq. No.    | 22702   | Seq. ID | OJ990505_05.9A11.C52 |
| Gene No.    | 47218   | Strand  | +                    |
| Start       | 2824  | End     | 4437                 |
| Name        | OJ990505_05.9A11.C52.ol.tw  | Method  | TBLASTX:Wheat        |
| Start       | 1779  | End     | 2217                 |
| GI          | none  | Score   | 196                  |
| Exons       | 1779..1973, 1784..1999, 2064..2177, 2067..2138, 2185..2217  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22702   | Seq. ID | OJ990505_05.9A11.C52 |
| Gene No.    | 47218   | Strand  | +                    |
| Start       | 2824  | End     | 4437                 |
| Name        | OJ990505_05.9A11.C52.ol.ts  | Method  | TBLASTX:Soybean      |
| Start       | 1784  | End     | 2223                 |
| GI          | none  | Score   | 244                  |
| Exons       | 1784..1933, 1785..1973, 1785..1973, 1804..1995, 1805..1996, 2048..2182, 2064..2177, 2067..2219, 2069..2203, 2170..2223, |         |                      |

2206..2223

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22702   | Seq. ID | OJ990505_05.9A11.C52 |
| Gene No.    | 47218   | Strand  | +                    |
| Start       | 2824  | End     | 4437                 |
| Name        | OJ990505_05.9A11.C52.ol.gp  | Method  | AAT/GAP              |
| Start       | 2824  | End     | 4437                 |
| GI          | 24105_1.R1084   | Score   | 1168                 |
| Exons       | 2824..3017, 3952..4437  |         |                      |
| GI Descrip. | '576771/gb U16256 OSU16256 0.0e+00 Oryza sativa cone SR1<br>sucrose-regulated mRNA, 3''-end sequence' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22703   | Seq. ID | OJ990505_05.9A11.C56 |
| Gene No.    | 47219   | Strand  | -                    |
| Start       | 62  | End     | 274                  |
| Name        | OJ990505_05.9A11.C56.ol.gp  | Method  | AAT/GAP              |
| Start       | 62  | End     | 274                  |
| GI          | 24105_1.R1084   | Score   | 377                  |
| Exons       | 62..274   |         |                      |
| GI Descrip. | '576771/gb U16256 OSU16256 0.0e+00 Oryza sativa cone SR1<br>sucrose-regulated mRNA, 3''-end sequence' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22704                      | Seq. ID | OJ990505_05.9A11.C59 |
| Gene No. | 47220                      | Strand  |                      |
| Start    | 51                         | End     | 470                  |
| Name     | OJ990505_05.9A11.C59.ol.tw | Method  | TBLASTX:Wheat        |
| Start    | 51                         | End     | 453                  |
| GI       | none                       | Score   | 117                  |
| Exons    | 51..452, 184..453          |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22704                      | Seq. ID | OJ990505_05.9A11.C59 |
| Gene No. | 47220                      | Strand  |                      |
| Start    | 51                         | End     | 470                  |
| Name     | OJ990505_05.9A11.C59.ol.tm | Method  | TBLASTX:Maize        |
| Start    | 216                        | End     | 470                  |
| GI       | none                       | Score   | 177                  |
| Exons    | 216..470                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22705  | Seq. ID | OJ990505_05.9A11.C60 |
| Gene No.    | 47221  | Strand  | +                    |
| Start       | 309  | End     | 626                  |
| Name        | OJ990505_05.9A11.C60.ol.gp   | Method  | AAT/GAP              |
| Start       | 309  | End     | 623                  |
| GI          | 29822_1.R1084  | Score   | 601                  |
| Exons       | 309..623   |         |                      |
| GI Descrip. | '4176420/dbj BAA37167  2.0e-11 (AB008097) cytochrome P450<br>[Arabidopsis thaliana]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22705                      | Seq. ID | OJ990505_05.9A11.C60 |
| Gene No. | 47221                      | Strand  | +                    |
| Start    | 309                        | End     | 626                  |
| Name     | OJ990505_05.9A11.C60.ol.tc | Method  | TBLASTX:Cress        |
| Start    | 461                        | End     | 626                  |
| GI       | none                       | Score   | 242                  |
| Exons    | 461..625, 462..626         |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22705 | Seq. ID | OJ990505_05.9A11.C60 |
|----------|-------|---------|----------------------|

22938



|          |  |         |                      |
|----------|--|---------|----------------------|
| Gene No. | 47221  | Strand  | +                    |
| Start    | 309  | End     | 626                  |
| Name     | OJ990505_05.9A11.C60.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 461  | End     | 626                  |
| GI       | none   | Score   | 260                  |
| Exons    | 461..625, 462..626   |         |                      |
|          |  |         |                      |
| Seq. No. | 22705  | Seq. ID | OJ990505_05.9A11.C60 |
| Gene No. | 47221  | Strand  | +                    |
| Start    | 309  | End     | 626                  |
| Name     | OJ990505_05.9A11.C60.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 461  | End     | 626                  |
| GI       | none   | Score   | 241                  |
| Exons    | 461..625, 462..626   |         |                      |
|          |  |         |                      |
| Seq. No. | 22706  | Seq. ID | OJ990505_05.9A11.C62 |
| Gene No. | 47222  | Strand  | -                    |
| Start    | 8748   | End     | 9212                 |
| Name     | OJ990505_05.9A11.C62.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 905  | End     | 1631                 |
| GI       | none   | Score   | 41                   |
| Exons    | 905..991, 921..992, 1108..1269, 1108..1272, 1112..1276, 1353..1412, 1434..1517, 1527..1631 |         |                      |
|          |  |         |                      |
| Seq. No. | 22706  | Seq. ID | OJ990505_05.9A11.C62 |
| Gene No. | 47222  | Strand  | -                    |
| Start    | 8748   | End     | 9212                 |
| Name     | OJ990505_05.9A11.C62.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 905  | End     | 1412                 |
| GI       | none   | Score   | 82                   |
| Exons    | 905..991, 1108..1272, 1112..1276, 1353..1412   |         |                      |
|          |  |         |                      |
| Seq. No. | 22706  | Seq. ID | OJ990505_05.9A11.C62 |
| Gene No. | 47222  | Strand  | -                    |
| Start    | 8748   | End     | 9212                 |
| Name     | OJ990505_05.9A11.C62.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 905  | End     | 1826                 |
| GI       | none   | Score   | 103                  |
| Exons    | 905..991, 1108..1275, 1133..1282, 1353..1409, 1434..1517, 1527..1631, 1704..1826           |         |                      |
|          |  |         |                      |
| Seq. No. | 22706  | Seq. ID | OJ990505_05.9A11.C62 |
| Gene No. | 47222  | Strand  | -                    |
| Start    | 8748   | End     | 9212                 |
| Name     | OJ990505_05.9A11.C62.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 1168   | End     | 1574                 |
| GI       | none   | Score   | 77                   |
| Exons    | 1168..1272, 1169..1276, 1353..1412, 1434..1517, 1527..1574                                 |         |                      |
|          |  |         |                      |
| Seq. No. | 22706  | Seq. ID | OJ990505_05.9A11.C62 |
| Gene No. | 47222  | Strand  | -                    |
| Start    | 8748   | End     | 9212                 |
| Name     | OJ990505_05.9A11.C62.o1.gp   | Method  | AAT/GAP              |
| Start    | 8748   | End     | 9212                 |
| GI       | 2443172  | Score   | 910                  |
| Exons    | 8748..9212   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22707  | Seq. ID | OJ990505_05.9A11.C63 |
| Gene No. | 47223  | Strand  | -                    |
| Start    | 2933   | End     | 3465                 |
| Name     | OJ990505_05.9A11.C63.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 316  | End     | 793                  |
| GI       | none   | Score   | 104                  |
| Exons    | 316..399, 317..397, 527..772, 528..776, 529..780, 538..780, 539..793 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22707  | Seq. ID | OJ990505_05.9A11.C63 |
| Gene No. | 47223  | Strand  | -                    |
| Start    | 2933   | End     | 3465                 |
| Name     | OJ990505_05.9A11.C63.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1022   | End     | 1327                 |
| GI       | none   | Score   | 147                  |
| Exons    | 1022..1141, 1023..1154, 1026..1154, 1034..1159, 1247..1327, 1258..1326, 1259..1327 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22707  | Seq. ID | OJ990505_05.9A11.C63 |
| Gene No. | 47223  | Strand  | -                    |
| Start    | 2933   | End     | 3465                 |
| Name     | OJ990505_05.9A11.C63.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 1264   | End     | 2248                 |
| GI       | none   | Score   | 125                  |
| Exons    | 1264..1341, 1265..1432, 1693..1845, 1960..2052, 1961..2248, 2083..2223 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22707  | Seq. ID | OJ990505_05.9A11.C63 |
| Gene No. | 47223  | Strand  | -                    |
| Start    | 2933   | End     | 3465                 |
| Name     | OJ990505_05.9A11.C63.o2.tm                     | Method  | TBLASTX:Maize        |
| Start    | 1271   | End     | 2248                 |
| GI       | none   | Score   | 72                   |
| Exons    | 1271..1357, 1741..1842, 1948..2220, 1949..2248 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22707                              | Seq. ID | OJ990505_05.9A11.C63 |
| Gene No. | 47223                              | Strand  | -                    |
| Start    | 2933                               | End     | 3465                 |
| Name     | OJ990505_05.9A11.C63.o1.ts         | Method  | TBLASTX:Soybean      |
| Start    | 1690                               | End     | 2248                 |
| GI       | none                               | Score   | 109                  |
| Exons    | 1690..1842, 1949..2248, 1960..2247 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22707  | Seq. ID | OJ990505_05.9A11.C63 |
| Gene No. | 47223  | Strand  | -                    |
| Start    | 2933   | End     | 3465                 |
| Name     | OJ990505_05.9A11.C63.o1.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 1693   | End     | 2131                 |
| GI       | none   | Score   | 105                  |
| Exons    | 1693..1842, 1762..1839, 1949..2131, 1957..2130 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22707                      | Seq. ID | OJ990505_05.9A11.C63 |
| Gene No. | 47223                      | Strand  | -                    |
| Start    | 2933                       | End     | 3465                 |
| Name     | OJ990505_05.9A11.C63.o1.gp | Method  | AAT/GAP              |
| Start    | 2933                       | End     | 3465                 |
| GI       | 5039089                    | Score   | 1018                 |

Exons 2933..3465

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22707  | Seq. ID | OJ990505_05.9A11.C63 |
| Gene No. | 47224  | Strand  |                      |
| Start    | 3380   | End     | 3556                 |
| Name     | OJ990505_05.9A11.C63.o3.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 3380   | End     | 3553                 |
| GI       | none   | Score   | 138                  |
| Exons    | 3380..3454, 3382..3456, 3391..3456, 3442..3552, 3443..3553 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22707                              | Seq. ID | OJ990505_05.9A11.C63 |
| Gene No. | 47224                              | Strand  |                      |
| Start    | 3380                               | End     | 3556                 |
| Name     | OJ990505_05.9A11.C63.o3.ts         | Method  | TBLASTX:Soybean      |
| Start    | 3388                               | End     | 3556                 |
| GI       | none                               | Score   | 174                  |
| Exons    | 3388..3555, 3392..3556, 3410..3556 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22708   | Seq. ID | OJ990505_05.9A11.C66 |
| Gene No. | 47225   | Strand  |                      |
| Start    | 14  | End     | 421                  |
| Name     | OJ990505_05.9A11.C66.o1.tw                    | Method  | TBLASTX:Wheat        |
| Start    | 14  | End     | 421                  |
| GI       | none  | Score   | 220                  |
| Exons    | 14..238, 14..238, 79..252, 299..421, 346..399 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22709  | Seq. ID | OJ990505_05.9A11.C67 |
| Gene No.    | 47226  | Strand  | +                    |
| Start       | 58   | End     | 175                  |
| Name        | OJ990505_05.9A11.C67.o1.gp   | Method  | AAT/GAP              |
| Start       | 58   | End     | 175                  |
| GI          | uC-osflcyp177g01a1   | Score   | 168                  |
| Exons       | 58..175  |         |                      |
| GI Descrip. | '4884864/gb AAD31846.1 AF133530_1 4.0e-12 (AF133530) water channel protein MipH [Mesembryanthemum crystallinum]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22709                      | Seq. ID | OJ990505_05.9A11.C67 |
| Gene No. | 47227                      | Strand  |                      |
| Start    | 1502                       | End     | 1904                 |
| Name     | OJ990505_05.9A11.C67.o3.tw | Method  | TBLASTX:Wheat        |
| Start    | 1502                       | End     | 1904                 |
| GI       | none                       | Score   | 294                  |
| Exons    | 1502..1771, 1503..1904     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22709  | Seq. ID | OJ990505_05.9A11.C67 |
| Gene No. | 47228  | Strand  |                      |
| Start    | 2478   | End     | 3275                 |
| Name     | OJ990505_05.9A11.C67.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 2478   | End     | 3275                 |
| GI       | none   | Score   | 149                  |
| Exons    | 2478..2654, 2541..2654, 2699..2935, 2703..2933, 2982..3275, 3110..3271 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22709                      | Seq. ID | OJ990505_05.9A11.C67 |
| Gene No. | 47228                      | Strand  |                      |
| Start    | 2478                       | End     | 3275                 |
| Name     | OJ990505_05.9A11.C67.o2.tm | Method  | TBLASTX:Maize        |

Start 2786  
 GI none  
 Exons 2786..2932, 2787..2933

End 2933  
 Score 183

Seq. No. 22709  
 Gene No. 47229  
 Start 3195  
 Name OJ990505\_05.9A11.C67.o1.ts  
 Start 3195  
 GI none  
 Exons 3195..3419, 3426..3560

Seq. ID OJ990505\_05.9A11.C67  
 Strand  
 End 3641  
 Method TBLASTX:Soybean  
 End 3560  
 Score 138

Seq. No. 22709  
 Gene No. 47229  
 Start 3195  
 Name OJ990505\_05.9A11.C67.o2.tw  
 Start 3276  
 GI none  
 Exons 3276..3611, 3296..3610

Seq. ID OJ990505\_05.9A11.C67  
 Strand  
 End 3641  
 Method TBLASTX:Wheat  
 End 3611  
 Score 390

Seq. No. 22709  
 Gene No. 47229  
 Start 3195  
 Name OJ990505\_05.9A11.C67.o1.tm  
 Start 3285  
 GI none  
 Exons 3285..3641, 3326..3631, 3348..3641

Seq. ID OJ990505\_05.9A11.C67  
 Strand  
 End 3641  
 Method TBLASTX:Maize  
 End 3641  
 Score 375

Seq. No. 22710  
 Gene No. 47230  
 Start 180  
 Name OJ990505\_05.9A11.C68.o2.tm  
 Start 180  
 GI none  
 Exons 180..278, 181..279, 270..356, 274..357, 367..453

Seq. ID OJ990505\_05.9A11.C68  
 Strand  
 End 837  
 Method TBLASTX:Maize  
 End 453  
 Score 95

Seq. No. 22710  
 Gene No. 47230  
 Start 180  
 Name OJ990505\_05.9A11.C68.o1.tw  
 Start 223  
 GI none  
 Exons 223..501, 384..485, 556..714, 700..837, 711..833

Seq. ID OJ990505\_05.9A11.C68  
 Strand  
 End 837  
 Method TBLASTX:Wheat  
 End 837  
 Score 271

Seq. No. 22710  
 Gene No. 47230  
 Start 180  
 Name OJ990505\_05.9A11.C68.o1.tm  
 Start 565  
 GI none  
 Exons 565..717, 666..716, 696..797, 697..798

Seq. ID OJ990505\_05.9A11.C68  
 Strand  
 End 837  
 Method TBLASTX:Maize  
 End 798  
 Score 144

Seq. No. 22711  
 Gene No. 47231  
 Start 2061  
 Name OJ990505\_05.9A11.C70.o1.gp  
 Start 2061

Seq. ID OJ990505\_05.9A11.C70  
 Strand -  
 End 2125  
 Method AAT/GAP  
 End 2125

GI 3760640 Score 86  
 Exons 2061..2125  
 GI Descrip. 4176420/dbj|BAA37167| 2.0e-11 (AB008097) cytochrome P450  
 [Arabidopsis thaliana]

Seq. No. 22712 Seq. ID OJ990505\_05.9A11.C73  
 Gene No. 47232 Strand +  
 Start 39 End 186  
 Name OJ990505\_05.9A11.C73.ol.gp Method AAT/GAP  
 Start 39 End 186  
 GI uC-osflcyp177g01a1 Score 238  
 Exons 39..186  
 GI Descrip. '4884864/gb|AAD31846.1|AF133530\_1 4.0e-12 (AF133530) water  
 channel protein MipH [Mesembryanthemum crystallinum]'

Seq. No. 22713 Seq. ID OJ990505\_05.9A11.C74  
 Gene No. 47233 Strand  
 Start 95 End 241  
 Name OJ990505\_05.9A11.C74.ol.tc Method TBLASTX:Cress  
 Start 95 End 241  
 GI none Score 191  
 Exons 95..241, 95..214, 97..240

Seq. No. 22714 Seq. ID OJ990505\_05.9A11.C75  
 Gene No. 47234 Strand  
 Start 251 End 548  
 Name OJ990505\_05.9A11.C75.ol.tm Method TBLASTX:Maize  
 Start 251 End 548  
 GI none Score 229  
 Exons 251..436, 251..421, 286..435, 468..548, 473..529

Seq. No. 22715 Seq. ID OJ990525\_07.9A15.C2  
 Gene No. 47235 Strand -  
 Start 1 End 876  
 Name OJ990525\_07.9A15.C2.ol.gp Method AAT/GAP  
 Start 1 End 301  
 GI 92272 1.R1084 Score 573  
 Exons 1..301  
 GI Descrip. '5091516/dbj|BAA78751.1| 2.0e-59 (AB023482) ESTs  
 C72761(E2193), AU056875(S20945), AU056876(S20945) correspond to a  
 region of the predicted gene.; Similar to Thermus thermophilus  
 gene for homocitrate synthase, homoaconitate hydratase, and  
 ORF, complete and part'

Seq. No. 22715 Seq. ID OJ990525\_07.9A15.C2  
 Gene No. 47235 Strand -  
 Start 1 End 876  
 Name OJ990525\_07.9A15.C2.ol.np Method AAT/NAP  
 Start 1 End 834  
 GI 5091516 Score 1079  
 Exons 1..622, 799..834  
 GI Descrip. (AB023482) ESTs C72761(E2193), AU056875(S20945), AU056876(S20945)  
 correspond to a region of the predicted gene.; Similar to  
 Thermus thermophilus gene for homocitrate synthase,  
 homoaconitate hydratase, and ORF, complete and part...

Seq. No. 22715 Seq. ID OJ990525\_07.9A15.C2

Gene No. 47235  
 Start 1  
 Name OJ990525\_07.9A15.C2.o1.gs  
 Start 25  
 GI none  
 Exons 25..622

Strand -  
 End 876  
 Method GENSCAN  
 End 622  
 Score .74

Seq. No. 22715  
 Gene No. 47235  
 Start 1  
 Name OJ990525\_07.9A15.C2.o1.ts  
 Start 29  
 GI none  
 Exons 29..346

Seq. ID OJ990525\_07.9A15.C2  
 Strand -  
 End 876  
 Method TBLASTX:Soybean  
 End 346  
 Score 228

Seq. No. 22715  
 Gene No. 47235  
 Start 1  
 Name OJ990525\_07.9A15.C2.o1.tm  
 Start 66  
 GI none  
 Exons 66..185, 67..186, 70..621, 71..289, 71..622, 262..582, 312..623

Seq. ID OJ990525\_07.9A15.C2  
 Strand -  
 End 876  
 Method TBLASTX:Maize  
 End 623  
 Score 110

Seq. No. 22715  
 Gene No. 47235  
 Start 1  
 Name OJ990525\_07.9A15.C2.o1.tc  
 Start 287  
 GI none  
 Exons 287..445, 321..443, 452..586, 479..520

Seq. ID OJ990525\_07.9A15.C2  
 Strand -  
 End 876  
 Method TBLASTX:Cress  
 End 586  
 Score 73

Seq. No. 22715  
 Gene No. 47235  
 Start 1  
 Name OJ990525\_07.9A15.C2.o2.gp  
 Start 327  
 GI LIB3477-004-P1-K1-D10  
 Exons 327..622, 799..876

Seq. ID OJ990525\_07.9A15.C2  
 Strand -  
 End 876  
 Method AAT/GAP  
 End 876  
 Score 702

GI Descrip. '5091516/dbj|BAA78751.1| 4.0e-58 (AB023482) ESTs C72761(E2193), AU056875(S20945), AU056876(S20945) correspond to a region of the predicted gene.; Similar to Thermus thermophilus gene for homocitrate synthase, homoaconitate hydratase, and ORF,complete and part'

Seq. No. 22716  
 Gene No. 47236  
 Start 1  
 Name OJ990525\_07.9A15.C3.o1.np  
 Start 1  
 GI 5091515  
 Exons 1..112

Seq. ID OJ990525\_07.9A15.C3  
 Strand +  
 End 112  
 Method AAT/NAP  
 End 112  
 Score 183

GI Descrip. (AB023482) Hypothetical protein [Oryza sativa]

Seq. No. 22716  
 Gene No. 47237  
 Start 263  
 Name OJ990525\_07.9A15.C3.o1.gs

Seq. ID OJ990525\_07.9A15.C3  
 Strand +  
 End 426  
 Method GENSCAN

Start 263  
 GI none  
 Exons 263..426

End 426  
 Score .61

Seq. No. 22717 Seq. ID OJ990525\_07.9A15.C4  
 Gene No. 47238 Strand +  
 Start 1 End 1739  
 Name OJ990525\_07.9A15.C4.o1.np Method AAT/NAP  
 Start 1 End 1739  
 GI 5091509 Score 2439  
 Exons 1..934, 1019..1125, 1241..1495, 1594..1739  
 GI Descrip. (AB023482) EST AU065533(C2174) corresponds to a region of the  
 predicted gene.; Similar to Homo sapiens splicing factor Prp8  
 mRNA, complete cds.(AF092565) [Oryza sativa]

Seq. No. 22717 Seq. ID OJ990525\_07.9A15.C4  
 Gene No. 47238 Strand +  
 Start 1 End 1739  
 Name OJ990525\_07.9A15.C4.o2.tm Method TBLASTX:Maize  
 Start 1 End 345  
 GI none Score 598  
 Exons 1..345, 3..344

Seq. No. 22717 Seq. ID OJ990525\_07.9A15.C4  
 Gene No. 47238 Strand +  
 Start 1 End 1739  
 Name OJ990525\_07.9A15.C4.o1.gs Method GENSCAN  
 Start 113 End 1732  
 GI none Score .65  
 Exons 113..934, 1019..1125, 1241..1495, 1594..1732

Seq. No. 22717 Seq. ID OJ990525\_07.9A15.C4  
 Gene No. 47238 Strand +  
 Start 1 End 1739  
 Name OJ990525\_07.9A15.C4.o1.tc Method TBLASTX:Cress  
 Start 117 End 597  
 GI none Score 369  
 Exons 117..596, 118..597, 118..594, 120..596

Seq. No. 22717 Seq. ID OJ990525\_07.9A15.C4  
 Gene No. 47238 Strand +  
 Start 1 End 1739  
 Name OJ990525\_07.9A15.C4.o1.ts Method TBLASTX:Soybean  
 Start 208 End 605  
 GI none Score 716  
 Exons 208..603, 210..605

Seq. No. 22717 Seq. ID OJ990525\_07.9A15.C4  
 Gene No. 47238 Strand +  
 Start 1 End 1739  
 Name OJ990525\_07.9A15.C4.o1.tm Method TBLASTX:Maize  
 Start 381 End 1739  
 GI none Score 723  
 Exons 381..932, 381..935, 382..942, 1014..1124, 1015..1125,  
 1022..1129, 1238..1498, 1239..1496, 1240..1497, 1588..1737,  
 1593..1739, 1593..1739

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22717   | Seq. ID | OJ990525_07.9A15.C4 |
| Gene No.    | 47238   | Strand  | +                   |
| Start       | 1   | End     | 1739                |
| Name        | OJ990525_07.9A15.C4.o2.tc   | Method  | TBLASTX:Cress       |
| Start       | 597   | End     | 855                 |
| GI          | none  | Score   | 436                 |
| Exons       | 597..854, 598..855  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22717   | Seq. ID | OJ990525_07.9A15.C4 |
| Gene No.    | 47238   | Strand  | +                   |
| Start       | 1   | End     | 1739                |
| Name        | OJ990525_07.9A15.C4.o2.ts   | Method  | TBLASTX:Soybean     |
| Start       | 910   | End     | 1354                |
| GI          | none  | Score   | 52                  |
| Exons       | 910..942, 912..935, 1012..1086, 1014..1124, 1014..1124, 1015..1125, 1019..1129, 1215..1352, 1238..1354, 1240..1353  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22717   | Seq. ID | OJ990525_07.9A15.C4 |
| Gene No.    | 47238   | Strand  | +                   |
| Start       | 1   | End     | 1739                |
| Name        | OJ990525_07.9A15.C4.o1.gp   | Method  | AAT/GAP             |
| Start       | 1427  | End     | 1739                |
| GI          | 3447_1.R1084  | Score   | 354                 |
| Exons       | 1427..1495, 1594..1739  |         |                     |
| GI Descrip. | '4521193/dbj AB013450.1 AB013450 1.0e-99 Oryza sativa DNA, similar sequence to Pib gene'  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22717   | Seq. ID | OJ990525_07.9A15.C4 |
| Gene No.    | 47238   | Strand  | +                   |
| Start       | 1   | End     | 1739                |
| Name        | OJ990525_07.9A15.C4.o3.ts   | Method  | TBLASTX:Soybean     |
| Start       | 1588  | End     | 1739                |
| GI          | none  | Score   | 241                 |
| Exons       | 1588..1737, 1591..1737, 1593..1739  |         |                     |
|             |   |         |                     |
| Seq. No.    | 22718   | Seq. ID | OJ990525_07.9A15.C5 |
| Gene No.    | 47239   | Strand  | -                   |
| Start       | 284   | End     | 477                 |
| Name        | OJ990525_07.9A15.C5.o1.gp   | Method  | AAT/GAP             |
| Start       | 284   | End     | 477                 |
| GI          | 92272_1.R1084   | Score   | 282                 |
| Exons       | 284..477  |         |                     |
| GI Descrip. | '5091516/dbj BAA78751.1  2.0e-59 (AB023482) ESTs C72761(E2193), AU056875(S20945), AU056876(S20945) correspond to a region of the predicted gene.; Similar to Thermus thermophilus gene for homocitrate synthase, homoaconitate hydratase, and ORF, complete and part' |         |                     |
|             |   |         |                     |
| Seq. No.    | 22719   | Seq. ID | OJ990525_07.9A15.C6 |
| Gene No.    | 47240   | Strand  | +                   |
| Start       | 75  | End     | 365                 |
| Name        | OJ990525_07.9A15.C6.o1.gp   | Method  | AAT/GAP             |
| Start       | 75  | End     | 365                 |
| GI          | 20314_1.R1084   | Score   | 309                 |
| Exons       | 75..115, 189..365   |         |                     |
| GI Descrip. | '3176710 2.0e-15 (AC002392) unknown protein [Arabidopsis thaliana]'   |         |                     |



Seq. No. 22719  
 Gene No. 47240  
 Start 75  
 Name OJ990525\_07.9A15.C6.ol.gs  
 Start 190  
 GI none  
 Exons 190..361

Seq. ID OJ990525\_07.9A15.C6  
 Strand +  
 End 365  
 Method GENSCAN  
 End 361  
 Score .9

Seq. No. 22720  
 Gene No. 47241  
 Start 1  
 Name OJ990525\_07.9A15.C7.ol.np  
 Start 1  
 GI 5091513  
 Exons 1..867  
 GI Descrip. (AB023482) Hypothetical protein [Oryza sativa]

Seq. ID OJ990525\_07.9A15.C7  
 Strand -  
 End 867  
 Method AAT/NAP  
 End 867  
 Score 1507

Seq. No. 22721  
 Gene No. 47242  
 Start 384  
 Name OJ990525\_07.9A15.C9.ol.gs  
 Start 384  
 GI none  
 Exons 384..492, 612..622

Seq. ID OJ990525\_07.9A15.C9  
 Strand -  
 End 622  
 Method GENSCAN  
 End 622  
 Score .59

Seq. No. 22722  
 Gene No. 47243  
 Start 116  
 Name OJ990525\_07.9A15.C13.ol.gs  
 Start 116  
 GI none  
 Exons 116..267

Seq. ID OJ990525\_07.9A15.C13  
 Strand +  
 End 267  
 Method GENSCAN  
 End 267  
 Score .78

Seq. No. 22723  
 Gene No. 47244  
 Start 1  
 Name OJ990525\_07.9A15.C14.ol.np  
 Start 1  
 GI 5091524  
 Exons 1..175, 261..354  
 GI Descrip. (AB023482) Hypothetical protein [Oryza sativa]

Seq. ID OJ990525\_07.9A15.C14  
 Strand +  
 End 592  
 Method AAT/NAP  
 End 354  
 Score 314

Seq. No. 22723  
 Gene No. 47244  
 Start 1  
 Name OJ990525\_07.9A15.C14.ol.gs  
 Start 60  
 GI none  
 Exons 60..137, 539..592

Seq. ID OJ990525\_07.9A15.C14  
 Strand +  
 End 592  
 Method GENSCAN  
 End 592  
 Score .45

Seq. No. 22724  
 Gene No. 47245  
 Start 585  
 Name OJ990525\_07.9A15.C19.ol.gp  
 Start 585  
 GI 20314\_1.R1084

Seq. ID OJ990525\_07.9A15.C19  
 Strand -  
 End 698  
 Method AAT/GAP  
 End 698  
 Score 197

Exons 585..698  
GI Descrip. '3176710 2.0e-15 (AC002392) unknown protein [Arabidopsis thaliana]'

Seq. No. 22725 Seq. ID OJ990525\_07.9A15.C21  
Gene No. 47246 Strand +  
Start 676 End 6273  
Name OJ990525\_07.9A15.C21.o1.gs Method GENSCAN  
Start 676 End 6273  
GI none Score .64  
Exons 676..776, 941..1179, 1230..1466, 2988..3292, 3366..3501, 4641..4787, 5370..5720, 6164..6273

Seq. No. 22725 Seq. ID OJ990525\_07.9A15.C21  
Gene No. 47246 Strand +  
Start 676 End 6273  
Name OJ990525\_07.9A15.C21.o1.np Method AAT/NAP  
Start 1552 End 6270  
GI 5091529 Score 2170  
Exons 1552..1720, 2988..3292, 3366..3501, 4419..4552, 4664..4787, 5370..5720, 6164..6270  
GI Descrip. (AB023482) ESTs C98382(C2985),D22444(C11129) correspond to a region of the predicted gene.; Similar to Arabidopsis thaliana APK1 gene for protein tyrosine-serine-threonine kinase.(D12522) [Oryza sativa]

Seq. No. 22725 Seq. ID OJ990525\_07.9A15.C21  
Gene No. 47246 Strand +  
Start 676 End 6273  
Name OJ990525\_07.9A15.C21.o1.gp Method AAT/GAP  
Start 3194 End 4701  
GI 2801055 Score 714  
Exons 3194..3292, 3366..3501, 4419..4552, 4664..4701  
GI Descrip. 5091529/dbj|BAA78764.1| 1.0e-71 (AB023482) ESTs C98382(C2985),D22444(C11129) correspond to a region of the predicted gene.; Similar to Arabidopsis thaliana APK1 gene for protein tyrosine-serine-threonine kinase.(D12522) [Oryza sativa]

Seq. No. 22725 Seq. ID OJ990525\_07.9A15.C21  
Gene No. 47246 Strand +  
Start 676 End 6273  
Name OJ990525\_07.9A15.C21.o2.gp Method AAT/GAP  
Start 4726 End 5618  
GI 6025026 Score 519  
Exons 4726..4787, 5370..5618  
GI Descrip. 5091529/dbj|BAA78764.1| 3.0e-44 (AB023482) ESTs C98382(C2985),D22444(C11129) correspond to a region of the predicted gene.; Similar to Arabidopsis thaliana APK1 gene for protein tyrosine-serine-threonine kinase.(D12522) [Oryza sativa]

Seq. No. 22725 Seq. ID OJ990525\_07.9A15.C21  
Gene No. 47247 Strand -  
Start 6033 End 6295  
Name OJ990525\_07.9A15.C21.o3.gp Method AAT/GAP  
Start 6033 End 6295  
GI 3445004 Score 464  
Exons 6033..6295

GI Descrip. 5091529/dbj|BAA78764.1| 2.0e-16 (AB023482) ESTs  
C98382(C2985),D22444(C11129) correspond to a region of the  
predicted gene.; Similar to Arabidopsis thaliana APK1 gene for  
protein tyrosine-serine-threonine kinase.(D12522) [Oryza sativa]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22725  | Seq. ID | OJ990525_07.9A15.C21 |
| Gene No. | 47248  | Strand  | -                    |
| Start    | 6727   | End     | 6993                 |
| Name     | OJ990525_07.9A15.C21.o2.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 3077   | End     | 3503                 |
| GI       | none   | Score   | 253                  |
| Exons    | 3077..3301, 3097..3291, 3368..3502, 3369..3500, 3372..3503 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22725  | Seq. ID | OJ990525_07.9A15.C21 |
| Gene No. | 47248  | Strand  | -                    |
| Start    | 6727   | End     | 6993                 |
| Name     | OJ990525_07.9A15.C21.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3086   | End     | 4693                 |
| GI       | none   | Score   | 272                  |
| Exons    | 3086..3301, 3088..3306, 3104..3340, 3365..3451, 3366..3452, 4649..4693 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22725  | Seq. ID | OJ990525_07.9A15.C21 |
| Gene No. | 47248  | Strand  | -                    |
| Start    | 6727   | End     | 6993                 |
| Name     | OJ990525_07.9A15.C21.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 3089   | End     | 3498                 |
| GI       | none   | Score   | 265                  |
| Exons    | 3089..3301, 3091..3306, 3098..3313, 3365..3496, 3366..3497, 3409..3498 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22725  | Seq. ID | OJ990525_07.9A15.C21 |
| Gene No. | 47248  | Strand  | -                    |
| Start    | 6727   | End     | 6993                 |
| Name     | OJ990525_07.9A15.C21.o2.tw                     | Method  | TBLASTX:Wheat        |
| Start    | 3152   | End     | 3503                 |
| GI       | none   | Score   | 62                   |
| Exons    | 3152..3223, 3239..3301, 3356..3499, 3387..3503 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22725  | Seq. ID | OJ990525_07.9A15.C21 |
| Gene No. | 47248  | Strand  | -                    |
| Start    | 6727   | End     | 6993                 |
| Name     | OJ990525_07.9A15.C21.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3453   | End     | 5779                 |
| GI       | none   | Score   | 78                   |
| Exons    | 3453..3500, 4424..4558, 4426..4548, 4433..4552, 4694..4795, 4709..4789, 5366..5779, 5368..5721 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22725  | Seq. ID | OJ990525_07.9A15.C21 |
| Gene No. | 47248  | Strand  | -                    |
| Start    | 6727   | End     | 6993                 |
| Name     | OJ990525_07.9A15.C21.o1.tw   | Method  | TBLASTX:Wheat        |
| Start    | 4424   | End     | 5533                 |
| GI       | none   | Score   | 166                  |
| Exons    | 4424..4552, 4432..4554, 4648..4719, 4649..4795, 4654..4803, 4759..4794, 5366..5533, 5368..5496 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22725  | Seq. ID | OJ990525_07.9A15.C21 |
| Gene No. | 47248  | Strand  | -                    |
| Start    | 6727   | End     | 6993                 |
| Name     | OJ990525_07.9A15.C21.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 4424   | End     | 5452                 |
| GI       | none   | Score   | 176                  |
| Exons    | 4424..4549, 4426..4548, 4648..4794, 4648..4722, 4649..4795, 4759..4794, 5366..5452, 5368..5451 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22725  | Seq. ID | OJ990525_07.9A15.C21 |
| Gene No. | 47248  | Strand  | -                    |
| Start    | 6727   | End     | 6993                 |
| Name     | OJ990525_07.9A15.C21.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 4444   | End     | 6238                 |
| GI       | none   | Score   | 147                  |
| Exons    | 4444..4554, 4445..4549, 4447..4554, 4640..4786, 4649..4795, 4662..4787, 5366..5728, 5372..5689, 5542..5739, 6080..6106, 6118..6147, 6179..6238 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22725                              | Seq. ID | OJ990525_07.9A15.C21 |
| Gene No. | 47248                              | Strand  | -                    |
| Start    | 6727                               | End     | 6993                 |
| Name     | OJ990525_07.9A15.C21.o3.tc         | Method  | TBLASTX:Cress        |
| Start    | 5474                               | End     | 5734                 |
| GI       | none                               | Score   | 232                  |
| Exons    | 5474..5734, 5486..5683, 5557..5694 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22725                      | Seq. ID | OJ990525_07.9A15.C21 |
| Gene No. | 47248                      | Strand  | -                    |
| Start    | 6727                       | End     | 6993                 |
| Name     | OJ990525_07.9A15.C21.o2.gs | Method  | GENSCAN              |
| Start    | 6727                       | End     | 6993                 |
| GI       | none                       | Score   | .82                  |
| Exons    | 6727..6848, 6909..6993     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22726  | Seq. ID | OJ990525_07.9A15.C22 |
| Gene No.    | 47249  | Strand  | +                    |
| Start       | 1  | End     | 1311                 |
| Name        | OJ990525_07.9A15.C22.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 197                  |
| GI          | 5091528  | Score   | 325                  |
| Exons       | 1..197   |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22726  | Seq. ID | OJ990525_07.9A15.C22 |
| Gene No.    | 47249  | Strand  | +                    |
| Start       | 1  | End     | 1311                 |
| Name        | OJ990525_07.9A15.C22.o2.np                     | Method  | AAT/NAP              |
| Start       | 6  | End     | 1311                 |
| GI          | 6815099  | Score   | 86                   |
| Exons       | 6..52, 1200..1311                              |         |                      |
| GI Descrip. | (AP001081) hypothetical protein [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22726                      | Seq. ID | OJ990525_07.9A15.C22 |
| Gene No. | 47249                      | Strand  | +                    |
| Start    | 1                          | End     | 1311                 |
| Name     | OJ990525_07.9A15.C22.o1.gs | Method  | GENSCAN              |

|       |                  |       |     |
|-------|------------------|-------|-----|
| Start | 28               | End   | 216 |
| GI    | none             | Score | .87 |
| Exons | 28..74, 108..216 |       |     |

  

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22726   | Seq. ID | OJ990525_07.9A15.C22 |
| Gene No.    | 47250   | Strand  | +                    |
| Start       | 1581  | End     | 1762                 |
| Name        | OJ990525_07.9A15.C22.o3.np                                      | Method  | AAT/NAP              |
| Start       | 1581  | End     | 1762                 |
| GI          | 5091527   | Score   | 220                  |
| Exons       | 1581..1762  |         |                      |
| GI Descrip. | (AB023482) Similar to Zea mays PRP gene.(X60432) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22726                      | Seq. ID | OJ990525_07.9A15.C22 |
| Gene No. | 47251                      | Strand  | -                    |
| Start    | 1565                       | End     | 1825                 |
| Name     | OJ990525_07.9A15.C22.o2.gs | Method  | GENSCAN              |
| Start    | 1565                       | End     | 1825                 |
| GI       | none                       | Score   | .51                  |
| Exons    | 1565..1825                 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22727   | Seq. ID | OJ990525_07.9A15.C23 |
| Gene No.    | 47252   | Strand  | +                    |
| Start       | 1   | End     | 708                  |
| Name        | OJ990525_07.9A15.C23.o1.gp  | Method  | AAT/GAP              |
| Start       | 1   | End     | 708                  |
| GI          | 102998_1.R1084  | Score   | 1372                 |
| Exons       | 1..708  |         |                      |
| GI Descrip. | '5091527/dbj BAA78762.1  2.0e-49 (AB023482) Similar to Zea mays PRP gene.(X60432) [Oryza sativa]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22727   | Seq. ID | OJ990525_07.9A15.C23 |
| Gene No.    | 47252   | Strand  | +                    |
| Start       | 1   | End     | 708                  |
| Name        | OJ990525_07.9A15.C23.o1.np                                      | Method  | AAT/NAP              |
| Start       | 1   | End     | 503                  |
| GI          | 5091527   | Score   | 956                  |
| Exons       | 1..503  |         |                      |
| GI Descrip. | (AB023482) Similar to Zea mays PRP gene.(X60432) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22727  | Seq. ID | OJ990525_07.9A15.C23 |
| Gene No. | 47252  | Strand  | +                    |
| Start    | 1  | End     | 708                  |
| Name     | OJ990525_07.9A15.C23.o1.tm                       | Method  | TBLASTX:Maize        |
| Start    | 228  | End     | 509                  |
| GI       | none   | Score   | 309                  |
| Exons    | 228..428, 255..362, 420..509, 425..496, 438..506 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22727                        | Seq. ID | OJ990525_07.9A15.C23 |
| Gene No. | 47252                        | Strand  | +                    |
| Start    | 1                            | End     | 708                  |
| Name     | OJ990525_07.9A15.C23.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 228                          | End     | 485                  |
| GI       | none                         | Score   | 339                  |
| Exons    | 228..485, 236..364, 425..484 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22727 | Seq. ID | OJ990525_07.9A15.C23 |
|----------|-------|---------|----------------------|

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Gene No.    | 47252   | Strand  | +                    |
| Start       | 1   | End     | 708                  |
| Name        | OJ990525_07.9A15.C23.o1.tc  | Method  | TBLASTX:Cress        |
| Start       | 236   | End     | 494                  |
| GI          | none  | Score   | 325                  |
| Exons       | 236..490, 237..494  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22727   | Seq. ID | OJ990525_07.9A15.C23 |
| Gene No.    | 47252   | Strand  | +                    |
| Start       | 1   | End     | 708                  |
| Name        | OJ990525_07.9A15.C23.o1.tw  | Method  | TBLASTX:Wheat        |
| Start       | 243   | End     | 488                  |
| GI          | none  | Score   | 56                   |
| Exons       | 243..287, 255..293, 288..449, 288..362, 441..488, 453..488  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22728   | Seq. ID | OJ990525_07.9A15.C24 |
| Gene No.    | 47253   | Strand  | +                    |
| Start       | 1   | End     | 161                  |
| Name        | OJ990525_07.9A15.C24.o1.gp  | Method  | AAT/GAP              |
| Start       | 1   | End     | 161                  |
| GI          | LIB3431-010-P1-N1-F11   | Score   | 249                  |
| Exons       | 1..161  |         |                      |
| GI Descrip. | '287403/dbj D10838 RICSBE1 1.0e-111 Rice gene for starch branching enzyme'  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22728   | Seq. ID | OJ990525_07.9A15.C24 |
| Gene No.    | 47254   | Strand  | +                    |
| Start       | 304   | End     | 5448                 |
| Name        | OJ990525_07.9A15.C24.o1.gs  | Method  | GENSCAN              |
| Start       | 304   | End     | 5318                 |
| GI          | none  | Score   | .72                  |
| Exons       | 304..553, 906..1311, 1410..1497, 1652..1915, 1995..2235, 2319..2395, 2841..3011, 3045..3185, 3310..3459, 3716..3880, 3972..4091, 4229..4431, 4508..4657, 4748..4895, 5047..5139, 5214..5318   |         |                      |
|             |   |         |                      |
| Seq. No.    | 22728   | Seq. ID | OJ990525_07.9A15.C24 |
| Gene No.    | 47254   | Strand  | +                    |
| Start       | 304   | End     | 5448                 |
| Name        | OJ990525_07.9A15.C24.o3.ts  | Method  | TBLASTX:Soybean      |
| Start       | 922   | End     | 1306                 |
| GI          | none  | Score   | 336                  |
| Exons       | 922..1167, 929..1165, 1250..1306, 1252..1305  |         |                      |
|             |   |         |                      |
| Seq. No.    | 22728   | Seq. ID | OJ990525_07.9A15.C24 |
| Gene No.    | 47254   | Strand  | +                    |
| Start       | 304   | End     | 5448                 |
| Name        | OJ990525_07.9A15.C24.o1.tc  | Method  | TBLASTX:Cress        |
| Start       | 925   | End     | 5318                 |
| GI          | none  | Score   | 334                  |
| Exons       | 925..1167, 929..1165, 1250..1312, 1252..1311, 1407..1493, 1411..1497, 1649..1918, 1649..1915, 1992..2243, 1994..2212, 1996..2235, 2317..2397, 2321..2395, 2323..2400, 2837..3010, 2838..3023, 2841..3026, 3090..3185, 3090..3185, 3091..3186, 3091..3153, 3092..3187, 3258..3458, 3262..3459, 3308..3460, 3309..3461, 3537..3641, 3537..3611, 3539..3628, 3713..3880, 3713..3880, 3727..3882, 3963..4070, 3969..4091, 3970..4071, |         |                      |

3977..4090, 4217..4282, 4218..4283, 4226..4417, 4228..4419,  
4228..4431, 4502..4663, 4505..4609, 4522..4611, 4527..4664,  
4745..4888, 4746..4901, 4746..4895, 4747..4896, 5046..5120,  
5047..5130, 5220..5318, 5238..5315

Seq. No. 22728 Seq. ID OJ990525\_07.9A15.C24  
Gene No. 47254 Strand +  
Start 304 End 5448  
Name OJ990525\_07.9A15.C24.o1.np Method AAT/NAP  
Start 929 End 5315  
GI 5091526 Score 3976  
Exons 929..1311, 1410..1497, 1652..1915, 1995..2235, 2319..2395,  
2841..3011, 3045..3185, 3310..3459, 3716..3880, 3972..4091,  
4229..4431, 4508..4657, 4748..4895, 5047..5139, 5214..5315  
GI Descrip. (AB023482) ESTs C27722(C52692),AU058088(S0509) correspond to a  
region of the predicted gene.; Similar to Arabidopsis thaliana  
ribonucleoside-diphosphate reductase large subunit mRNA,  
complete cds. (AF092841) [Oryza sativa]

Seq. No. 22728 Seq. ID OJ990525\_07.9A15.C24  
Gene No. 47254 Strand +  
Start 304 End 5448  
Name OJ990525\_07.9A15.C24.o2.tw Method TBLASTX:Wheat  
Start 958 End 1279  
GI none Score 169  
Exons 958..1056, 959..1060, 970..1062, 1045..1167, 1051..1092,  
1055..1165, 1250..1279, 1252..1278

Seq. No. 22728 Seq. ID OJ990525\_07.9A15.C24  
Gene No. 47254 Strand +  
Start 304 End 5448  
Name OJ990525\_07.9A15.C24.o1.tm Method TBLASTX:Maize  
Start 1783 End 5321  
GI none Score 226  
Exons 1783..1914, 1784..1918, 1785..1919, 1992..2243, 1994..2212,  
1996..2235, 2310..2396, 2317..2397, 2321..2395, 2824..3006,  
2837..3022, 2841..3005, 3063..3185, 3092..3202, 3093..3185,  
3094..3186, 3095..3187, 3262..3459, 3307..3459, 3309..3467,  
3309..3461, 3520..3627, 3529..3627, 3530..3628, 3543..3629,  
3713..3880, 3713..3880, 3714..3881, 3715..3885, 3969..4091,  
3970..4092, 3971..4093, 4060..4101, 4226..4417, 4227..4430,  
4228..4431, 4228..4431, 4495..4662, 4505..4663, 4506..4664,  
4527..4664, 4745..4894, 4746..4901, 4747..4896, 5046..5138,  
5046..5138, 5047..5139, 5238..5321, 5241..5321

Seq. No. 22728 Seq. ID OJ990525\_07.9A15.C24  
Gene No. 47254 Strand +  
Start 304 End 5448  
Name OJ990525\_07.9A15.C24.o4.ts Method TBLASTX:Soybean  
Start 2085 End 2397  
GI none Score 271  
Exons 2085..2243, 2087..2212, 2317..2397, 2321..2395

Seq. No. 22728 Seq. ID OJ990525\_07.9A15.C24  
Gene No. 47254 Strand +  
Start 304 End 5448  
Name OJ990525\_07.9A15.C24.o1.ts Method TBLASTX:Soybean

Start 2856 End 3850  
 GI none Score 201  
 Exons 2856..2975, 2858..2974, 2976..3011, 3090..3185, 3092..3202,  
 3095..3187, 3262..3459, 3309..3458, 3537..3659, 3538..3612,  
 3539..3625, 3713..3850, 3713..3850

Seq. No. 22728 Seq. ID OJ990525\_07.9A15.C24  
 Gene No. 47254 Strand +  
 Start 304 End 5448  
 Name OJ990525\_07.9A15.C24.o1.tw Method TBLASTX:Wheat  
 Start 4495 End 5141  
 GI none Score 172  
 Exons 4495..4662, 4505..4663, 4506..4664, 4507..4665, 4527..4664,  
 4745..4894, 4746..4901, 4752..4895, 4753..4896, 5044..5136,  
 5046..5138, 5046..5141, 5047..5139

Seq. No. 22728 Seq. ID OJ990525\_07.9A15.C24  
 Gene No. 47254 Strand +  
 Start 304 End 5448  
 Name OJ990525\_07.9A15.C24.o2.ts Method TBLASTX:Soybean  
 Start 4514 End 4905  
 GI none Score 75  
 Exons 4514..4606, 4514..4663, 4516..4662, 4527..4664, 4737..4898,  
 4745..4897, 4747..4905

Seq. No. 22728 Seq. ID OJ990525\_07.9A15.C24  
 Gene No. 47254 Strand +  
 Start 304 End 5448  
 Name OJ990525\_07.9A15.C24.o2.gp Method AAT/GAP  
 Start 4842 End 5448  
 GI 2311567 Score 673  
 Exons 4842..4895, 5047..5139, 5214..5448  
 GI Descrip. 5091526/dbj|BAA78761.1| 5.0e-38 (AB023482) ESTs  
 C27722(C52692),AU058088(S0509) correspond to a region of the  
 predicted gene.; Similar to Arabidopsis thaliana  
 ribonucleoside-diphosphate reductase large subunit mRNA,  
 complete cds.(AF092841) [Oryza sativa]

Seq. No. 22729 Seq. ID OJ990525\_07.9A15.C26  
 Gene No. 47255 Strand +  
 Start 576 End 4473  
 Name OJ990525\_07.9A15.C26.o1.np Method AAT/NAP  
 Start 576 End 2788  
 GI 6006872 Score 562  
 Exons 576..710, 792..848, 1084..1132, 1238..1326, 1448..1521,  
 1614..1656, 1850..1910, 2014..2039, 2119..2196, 2295..2375,  
 2447..2512, 2621..2788  
 GI Descrip. (AC009540) s-syntxin-like protein [Arabidopsis thaliana]

Seq. No. 22729 Seq. ID OJ990525\_07.9A15.C26  
 Gene No. 47255 Strand +  
 Start 576 End 4473  
 Name OJ990525\_07.9A15.C26.o1.gs Method GENSCAN  
 Start 594 End 4473  
 GI none Score .8  
 Exons 594..710, 792..848, 1084..1132, 1238..1326, 1448..1521,  
 1614..1656, 1850..1910, 2014..2039, 2119..2196, 2295..2375,



2447..2512, 2621..2775, 4362..4473

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22729                      | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47256                      | Strand  | +                    |
| Start    | 7515                       | End     | 8015                 |
| Name     | OJ990525_07.9A15.C26.o3.gs | Method  | GENSCAN              |
| Start    | 7515                       | End     | 8015                 |
| GI       | none                       | Score   | .98                  |
| Exons    | 7515..8015                 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22729                                    | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47257                                    | Strand  | +                    |
| Start    | 12781                                    | End     | 16098                |
| Name     | OJ990525_07.9A15.C26.o5.gs               | Method  | GENSCAN              |
| Start    | 12781                                    | End     | 16052                |
| GI       | none                                     | Score   | .7                   |
| Exons    | 12781..12834, 14233..14391, 15285..16052 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22729   | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No.    | 47257   | Strand  | +                    |
| Start       | 12781   | End     | 16098                |
| Name        | OJ990525_07.9A15.C26.o5.np  | Method  | AAT/NAP              |
| Start       | 12781   | End     | 16098                |
| GI          | 5091523   | Score   | 1689                 |
| Exons       | 12781..12834, 14233..14391, 15285..16098  |         |                      |
| GI Descrip. | (AB023482) Similar to Gallus gallus mRNA for attachment region binding protein (ARBP).(Y14166) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22729  | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47258  | Strand  | -                    |
| Start    | 5220   | End     | 7761                 |
| Name     | OJ990525_07.9A15.C26.o2.gs                                 | Method  | GENSCAN              |
| Start    | 5220   | End     | 7393                 |
| GI       | none   | Score   | .92                  |
| Exons    | 5220..5340, 5446..5556, 6062..6147, 6781..6890, 7168..7393 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22729   | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No.    | 47258   | Strand  | -                    |
| Start       | 5220  | End     | 7761                 |
| Name        | OJ990525_07.9A15.C26.o2.np  | Method  | AAT/NAP              |
| Start       | 5223  | End     | 7393                 |
| GI          | 5091525   | Score   | 1008                 |
| Exons       | 5223..5340, 5446..5556, 6062..6147, 6781..6890, 7168..7393  |         |                      |
| GI Descrip. | (AB023482) EST C97523(C60312) corresponds to a region of the predicted gene.; Hypothetical protein [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22729   | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No.    | 47258   | Strand  | -                    |
| Start       | 5220  | End     | 7761                 |
| Name        | OJ990525_07.9A15.C26.o1.gp  | Method  | AAT/GAP              |
| Start       | 7150  | End     | 7761                 |
| GI          | 3760267   | Score   | 694                  |
| Exons       | 7150..7319, 7545..7761  |         |                      |
| GI Descrip. | 5091525/dbj BAA78760.1  1.0e-20 (AB023482) EST C97523(C60312) corresponds to a region of the predicted gene.; Hypothetical protein [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22729   | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47259   | Strand  | -                    |
| Start    | 8687  | End     | 10227                |
| Name     | OJ990525_07.9A15.C26.o4.gs                        | Method  | GENSCAN              |
| Start    | 8687  | End     | 10227                |
| GI       | none  | Score   | .4                   |
| Exons    | 8687..8813, 8996..9276, 9852..10040, 10090..10227 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22729  | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No.    | 47259  | Strand  | -                    |
| Start       | 8687   | End     | 10227                |
| Name        | OJ990525_07.9A15.C26.o3.np                     | Method  | AAT/NAP              |
| Start       | 8817   | End     | 9312                 |
| GI          | 5091524  | Score   | 637                  |
| Exons       | 8817..8910, 8996..9312                         |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22729  | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No.    | 47260  | Strand  | -                    |
| Start       | 13291  | End     | 13505                |
| Name        | OJ990525_07.9A15.C26.o2.gp   | Method  | AAT/GAP              |
| Start       | 13291  | End     | 13505                |
| GI          | LIB3477-003-P1-K1-E9   | Score   | 115                  |
| Exons       | 13291..13320, 13428..13505   |         |                      |
| GI Descrip. | '2498586/sp Q40638 MP01_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY S 1 PRECURSOR (ORY S I) >gi_1173557 (U31771) Ory s 1 [Oryza sativa]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22729   | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No.    | 47261   | Strand  | -                    |
| Start       | 14799   | End     | 18167                |
| Name        | OJ990525_07.9A15.C26.o3.gp  | Method  | AAT/GAP              |
| Start       | 14799   | End     | 17741                |
| GI          | 20314_1.R1084   | Score   | 905                  |
| Exons       | 14799..15015, 17000..17171, 17454..17514, 17661..17741              |         |                      |
| GI Descrip. | '3176710 2.0e-15 (AC002392) unknown protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22729  | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47261  | Strand  | -                    |
| Start    | 14799  | End     | 18167                |
| Name     | OJ990525_07.9A15.C26.o6.gs   | Method  | GENSCAN              |
| Start    | 16407  | End     | 18167                |
| GI       | none   | Score   | .72                  |
| Exons    | 16407..16423, 17000..17171, 17454..17514, 17661..17737, 17827..18167 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22729  | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47262  | Strand  | -                    |
| Start    | 18073  | End     | 18205                |
| Name     | OJ990525_07.9A15.C26.o4.tm   | Method  | TBLASTX:Maize        |
| Start    | 582  | End     | 1660                 |
| GI       | none   | Score   | 161                  |
| Exons    | 582..716, 587..712, 790..849, 820..852, 1062..1130, 1084..1131, 1234..1326, 1237..1326, 1448..1513, 1450..1512, 1598..1660, 1618..1656 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22729  | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47262  | Strand  | -                    |
| Start    | 18073  | End     | 18205                |
| Name     | OJ990525_07.9A15.C26.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 1837   | End     | 2710                 |
| GI       | none   | Score   | 91                   |
| Exons    | 1837..1908, 1847..1909, 2009..2044, 2010..2039, 2107..2199, 2110..2199, 2292..2378, 2434..2505, 2444..2515, 2606..2710, 2620..2706 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22729  | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47262  | Strand  | -                    |
| Start    | 18073  | End     | 18205                |
| Name     | OJ990525_07.9A15.C26.o2.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 1853   | End     | 2713                 |
| GI       | none   | Score   | 62                   |
| Exons    | 1853..1909, 2107..2199, 2292..2378, 2444..2515, 2609..2713 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22729  | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47262  | Strand  | -                    |
| Start    | 18073  | End     | 18205                |
| Name     | OJ990525_07.9A15.C26.o2.ts                                 | Method  | TBLASTX:Soybean      |
| Start    | 2116   | End     | 2716                 |
| GI       | none   | Score   | 74                   |
| Exons    | 2116..2199, 2292..2378, 2444..2515, 2609..2716, 2650..2715 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22729                      | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47262                      | Strand  | -                    |
| Start    | 18073                      | End     | 18205                |
| Name     | OJ990525_07.9A15.C26.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 11088                      | End     | 11431                |
| GI       | none                       | Score   | 83                   |
| Exons    | 11088..11222, 11222..11431 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22729  | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47262  | Strand  | -                    |
| Start    | 18073  | End     | 18205                |
| Name     | OJ990525_07.9A15.C26.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 11705  | End     | 12290                |
| GI       | none   | Score   | 125                  |
| Exons    | 11705..11848, 11728..11847, 11865..12290, 11865..12161, 12059..12289 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22729  | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47262  | Strand  | -                    |
| Start    | 18073  | End     | 18205                |
| Name     | OJ990525_07.9A15.C26.o2.tw                             | Method  | TBLASTX:Wheat        |
| Start    | 11753  | End     | 12068                |
| GI       | none   | Score   | 107                  |
| Exons    | 11753..11848, 11771..11845, 11832..12032, 11862..12068 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22729                      | Seq. ID | OJ990525_07.9A15.C26 |
| Gene No. | 47262                      | Strand  | -                    |
| Start    | 18073                      | End     | 18205                |
| Name     | OJ990525_07.9A15.C26.o1.tm | Method  | TBLASTX:Maize        |
| Start    | 14891                      | End     | 18183                |
| GI       | none                       | Score   | 172                  |

Exons 14891..14944, 14892..15017, 14901..15014, 16997..17074,  
17011..17094, 17033..17170, 17035..17181, 17067..17183,  
17443..17517, 17445..17516, 17661..17744, 17663..17743,  
17824..18024, 17827..18024, 18022..18183, 18026..18181

Seq. No. 22729 Seq. ID OJ990525\_07.9A15.C26  
Gene No. 47262 Strand -  
Start 18073 End 18205  
Name OJ990525\_07.9A15.C26.o1.tc Method TBLASTX:Cress  
Start 17660 End 18205  
GI none Score 72  
Exons 17660..17743, 17661..17741, 17824..17973, 17959..18048,  
18043..18135, 18046..18183, 18065..18205

Seq. No. 22729 Seq. ID OJ990525\_07.9A15.C26  
Gene No. 47262 Strand -  
Start 18073 End 18205  
Name OJ990525\_07.9A15.C26.o1.ts Method TBLASTX:Soybean  
Start 17790 End 18183  
GI none Score 117  
Exons 17790..18032, 17824..18018, 17824..18048, 17828..18028,  
18049..18183

Seq. No. 22729 Seq. ID OJ990525\_07.9A15.C26  
Gene No. 47262 Strand -  
Start 18073 End 18205  
Name OJ990525\_07.9A15.C26.o4.gp Method AAT/GAP  
Start 18073 End 18172  
GI LIB3433-029-P1-K1-B10 Score 160  
Exons 18073..18172  
GI Descrip. '5091522/dbj|BAA78757.1| 4.0e-19 (AB023482) Similar to  
Arabidopsis thaliana chromosome II BAC T20K24 genomic sequence,  
complete sequence.(AC002392) [Oryza sativa]'

Seq. No. 22730 Seq. ID OJ990525\_07.9A15.C27  
Gene No. 47263 Strand -  
Start 195 End 550  
Name OJ990525\_07.9A15.C27.o1.gp Method AAT/GAP  
Start 195 End 475  
GI LIB3433-029-P1-K1-B10 Score 223  
Exons 195..219, 328..475  
GI Descrip. '5091522/dbj|BAA78757.1| 4.0e-19 (AB023482) Similar to  
Arabidopsis thaliana chromosome II BAC T20K24 genomic sequence,  
complete sequence.(AC002392) [Oryza sativa]'

Seq. No. 22730 Seq. ID OJ990525\_07.9A15.C27  
Gene No. 47263 Strand -  
Start 195 End 550  
Name OJ990525\_07.9A15.C27.o1.tm Method TBLASTX:Maize  
Start 318 End 476  
GI none Score 129  
Exons 318..446, 320..445, 441..476

Seq. No. 22730 Seq. ID OJ990525\_07.9A15.C27  
Gene No. 47263 Strand -  
Start 195 End 550  
Name OJ990525\_07.9A15.C27.o1.np Method AAT/NAP

|             |   |       |     |
|-------------|---|-------|-----|
| Start       | 326   | End   | 522 |
| GI          | 5091522   | Score | 299 |
| Exons       | 326..522  |       |     |
| GI Descrip. | (AB023482) Similar to Arabidopsis thaliana chromosome II BAC T20K24 genomic sequence, complete sequence.(AC002392) [Oryza sativa] |       |     |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22730                      | Seq. ID | OJ990525_07.9A15.C27 |
| Gene No. | 47263                      | Strand  | -                    |
| Start    | 195                        | End     | 550                  |
| Name     | OJ990525_07.9A15.C27.o1.gs | Method  | GENSCAN              |
| Start    | 340                        | End     | 550                  |
| GI       | none                       | Score   | .95                  |
| Exons    | 340..550                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22731                      | Seq. ID | OJ990525_07.9A15.C28 |
| Gene No. | 47264                      | Strand  | +                    |
| Start    | 1199                       | End     | 2149                 |
| Name     | OJ990525_07.9A15.C28.o1.gs | Method  | GENSCAN              |
| Start    | 1199                       | End     | 2149                 |
| GI       | none                       | Score   | .8                   |
| Exons    | 1199..1538, 2055..2149     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22731  | Seq. ID | OJ990525_07.9A15.C28 |
| Gene No.    | 47264  | Strand  | +                    |
| Start       | 1199   | End     | 2149                 |
| Name        | OJ990525_07.9A15.C28.o1.np                     | Method  | AAT/NAP              |
| Start       | 1199   | End     | 2146                 |
| GI          | 5091521  | Score   | 686                  |
| Exons       | 1199..1538, 2055..2146                         |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22731  | Seq. ID | OJ990525_07.9A15.C28 |
| Gene No.    | 47265  | Strand  | +                    |
| Start       | 7007   | End     | 7806                 |
| Name        | OJ990525_07.9A15.C28.o3.np                     | Method  | AAT/NAP              |
| Start       | 7007   | End     | 7806                 |
| GI          | 5091519  | Score   | 943                  |
| Exons       | 7007..7031, 7254..7806                         |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22731  | Seq. ID | OJ990525_07.9A15.C28 |
| Gene No. | 47266  | Strand  | -                    |
| Start    | 5726   | End     | 6704                 |
| Name     | OJ990525_07.9A15.C28.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 5720   | End     | 6701                 |
| GI       | none   | Score   | 59                   |
| Exons    | 5720..5806, 5723..5824, 5733..5828, 5825..5881, 5855..5980, 5858..6190, 5862..6047, 6041..6193, 6114..6260, 6188..6691, 6189..6692, 6588..6701 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22731                      | Seq. ID | OJ990525_07.9A15.C28 |
| Gene No. | 47266                      | Strand  | -                    |
| Start    | 5726                       | End     | 6704                 |
| Name     | OJ990525_07.9A15.C28.o1.gp | Method  | AAT/GAP              |
| Start    | 5726                       | End     | 6163                 |
| GI       | 8546_1.R1084               | Score   | 817                  |

Exons 5726..6163  
 GI Descrip. '5091520/dbj|BAA78755.1| 2.0e-42 (AB023482) ESTs  
 AU058081(E30812),AU058365(E50679), AU030138(E50679) correspond  
 to a region of the predicted gene.; Similar to Spinacia oleracea  
 mRNA for proteasome 37kD subunit.(X96974) [Oryza sativa]'

Seq. No. 22731 Seq. ID OJ990525\_07.9A15.C28  
 Gene No. 47266 Strand -  
 Start 5726 End 6704  
 Name OJ990525\_07.9A15.C28.o2.np Method AAT/NAP  
 Start 5894 End 6643  
 GI 5091520 Score 1262  
 Exons 5894..6643  
 GI Descrip. (AB023482) ESTs AU058081(E30812),AU058365(E50679),  
 AU030138(E50679) correspond to a region of the predicted gene.;  
 Similar to Spinacia oleracea mRNA for proteasome 37kD  
 subunit.(X96974) [Oryza sativa]

Seq. No. 22731 Seq. ID OJ990525\_07.9A15.C28  
 Gene No. 47266 Strand -  
 Start 5726 End 6704  
 Name OJ990525\_07.9A15.C28.o1.tc Method TBLASTX:Cress  
 Start 5897 End 6682  
 GI none Score 55  
 Exons 5897..5974, 5898..5975, 5987..6682, 5988..6341, 6378..6500,  
 6555..6644

Seq. No. 22731 Seq. ID OJ990525\_07.9A15.C28  
 Gene No. 47266 Strand -  
 Start 5726 End 6704  
 Name OJ990525\_07.9A15.C28.o1.ts Method TBLASTX:Soybean  
 Start 5987 End 6644  
 GI none Score 55  
 Exons 5987..6079, 5988..6047, 6080..6643, 6089..6283, 6114..6644

Seq. No. 22731 Seq. ID OJ990525\_07.9A15.C28  
 Gene No. 47266 Strand -  
 Start 5726 End 6704  
 Name OJ990525\_07.9A15.C28.o1.tw Method TBLASTX:Wheat  
 Start 6015 End 6662  
 GI none Score 43  
 Exons 6015..6047, 6017..6433, 6041..6229, 6114..6434, 6557..6661,  
 6558..6662

Seq. No. 22731 Seq. ID OJ990525\_07.9A15.C28  
 Gene No. 47266 Strand -  
 Start 5726 End 6704  
 Name OJ990525\_07.9A15.C28.o2.gp Method AAT/GAP  
 Start 6168 End 6704  
 GI 31845\_1.R1084 Score 997  
 Exons 6168..6704  
 GI Descrip. '5091520/dbj|BAA78755.1| 8.0e-76 (AB023482) ESTs  
 AU058081(E30812),AU058365(E50679), AU030138(E50679) correspond  
 to a region of the predicted gene.; Similar to Spinacia oleracea  
 mRNA for proteasome 37kD subunit.(X96974) [Oryza sativa]'

Seq. No. 22732 Seq. ID OJ990525\_07.9A15.C29

|             |  |        |         |
|-------------|--|--------|---------|
| Gene No.    | 47267  | Strand | +       |
| Start       | 1  | End    | 93      |
| Name        | OJ990525_07.9A15.C29.o1.np                     | Method | AAT/NAP |
| Start       | 1  | End    | 93      |
| GI          | 5091519  | Score  | 107     |
| Exons       | 1..93  |        |         |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |        |         |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22732   | Seq. ID | OJ990525_07.9A15.C29 |
| Gene No.    | 47268   | Strand  | -                    |
| Start       | 1   | End     | 3700                 |
| Name        | OJ990525_07.9A15.C29.o2.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 2076                 |
| GI          | 6056375   | Score   | 236                  |
| Exons       | 1..62, 1414..1600, 1724..2076   |         |                      |
| GI Descrip. | (AC009894) Similar to serine/threonine kinases [Arabidopsis thaliana] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22732  | Seq. ID | OJ990525_07.9A15.C29 |
| Gene No.    | 47268  | Strand  | -                    |
| Start       | 1  | End     | 3700                 |
| Name        | OJ990525_07.9A15.C29.o1.gp   | Method  | AAT/GAP              |
| Start       | 758  | End     | 1140                 |
| GI          | 4714092  | Score   | 689                  |
| Exons       | 758..1140  |         |                      |
| GI Descrip. | 5091496/dbj AB023482.2 AB023482 1.0e-173 Oryza sativa genomic DNA, chromosome 6, clone P0680A03, complete sequence |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22732  | Seq. ID | OJ990525_07.9A15.C29 |
| Gene No. | 47268  | Strand  | -                    |
| Start    | 1  | End     | 3700                 |
| Name     | OJ990525_07.9A15.C29.o1.gs   | Method  | GENSCAN              |
| Start    | 1128   | End     | 3700                 |
| GI       | none   | Score   | .75                  |
| Exons    | 1128..1312, 1414..1600, 1724..2028, 2295..2356, 3111..3155, 3624..3700 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22732  | Seq. ID | OJ990525_07.9A15.C29 |
| Gene No.    | 47268  | Strand  | -                    |
| Start       | 1  | End     | 3700                 |
| Name        | OJ990525_07.9A15.C29.o2.gp   | Method  | AAT/GAP              |
| Start       | 1230   | End     | 1848                 |
| GI          | 286986   | Score   | 677                  |
| Exons       | 1230..1312, 1414..1600, 1724..1848   |         |                      |
| GI Descrip. | 6056372/gb AAF02836.1 AC009894_7 2.0e-24 (AC009894) Very similar to receptor-like serine/threonine kinase [Arabidopsis thaliana] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22732  | Seq. ID | OJ990525_07.9A15.C29 |
| Gene No. | 47268  | Strand  | -                    |
| Start    | 1  | End     | 3700                 |
| Name     | OJ990525_07.9A15.C29.o1.tc                                 | Method  | TBLASTX:Cress        |
| Start    | 1418   | End     | 2008                 |
| GI       | none   | Score   | 79                   |
| Exons    | 1418..1609, 1419..1583, 1723..1752, 1772..1885, 1934..2008 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22733 | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No. | 47269 | Strand  | +                    |

|             |  |        |         |
|-------------|--|--------|---------|
| Start       | 895  | End    | 1032    |
| Name        | OJ990525_07.9A15.C30.o1.np                     | Method | AAT/NAP |
| Start       | 895  | End    | 1032    |
| GI          | 5091518  | Score  | 220     |
| Exons       | 895..1032                                      |        |         |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |        |         |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22733                              | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No. | 47270                              | Strand  | +                    |
| Start    | 4639                               | End     | 5331                 |
| Name     | OJ990525_07.9A15.C30.o2.gs         | Method  | GENSCAN              |
| Start    | 4639                               | End     | 5331                 |
| GI       | none                               | Score   | .41                  |
| Exons    | 4639..4773, 4814..5009, 5024..5331 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22733  | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No.    | 47271  | Strand  | +                    |
| Start       | 8628   | End     | 9041                 |
| Name        | OJ990525_07.9A15.C30.o4.np                     | Method  | AAT/NAP              |
| Start       | 8628   | End     | 9041                 |
| GI          | 5091515  | Score   | 585                  |
| Exons       | 8628..8684, 8748..9041                         |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22733  | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No.    | 47272  | Strand  | -                    |
| Start       | 4728   | End     | 5295                 |
| Name        | OJ990525_07.9A15.C30.o2.np                     | Method  | AAT/NAP              |
| Start       | 4728   | End     | 5295                 |
| GI          | 5091517  | Score   | 545                  |
| Exons       | 4728..4800, 4899..5058, 5178..5295             |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22733   | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No.    | 47273   | Strand  | -                    |
| Start       | 6676  | End     | 8885                 |
| Name        | OJ990525_07.9A15.C30.o1.gp  | Method  | AAT/GAP              |
| Start       | 6461  | End     | 7218                 |
| GI          | 92272_1.R1084   | Score   | 1422                 |
| Exons       | 6461..7218  |         |                      |
| GI Descrip. | '5091516/dbj BAA78751.1  2.0e-59 (AB023482) ESTs<br>C72761(E2193), AU056875(S20945), AU056876(S20945) correspond to a<br>region of the predicted gene.; Similar to Thermus thermophilus<br>gene for homocitrate synthase, homoaconitate hydratase, and<br>ORF, complete and part' |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22733                              | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No. | 47273                              | Strand  | -                    |
| Start    | 6676                               | End     | 8885                 |
| Name     | OJ990525_07.9A15.C30.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 6652                               | End     | 6931                 |
| GI       | none                               | Score   | 337                  |
| Exons    | 6652..6930, 6656..6931, 6674..6931 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22733 | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No. | 47273 | Strand  | -                    |
| Start    | 6676  | End     | 8885                 |



|       |                            |        |         |
|-------|----------------------------|--------|---------|
| Name  | OJ990525_07.9A15.C30.o3.gs | Method | GENSCAN |
| Start | 6676                       | End    | 8885    |
| GI    | none                       | Score  | .49     |
| Exons | 6676..7539, 8766..8885     |        |         |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22733  | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No.    | 47273  | Strand  | -                    |
| Start       | 6676   | End     | 8885                 |
| Name        | OJ990525_07.9A15.C30.o3.np   | Method  | AAT/NAP              |
| Start       | 6679   | End     | 7751                 |
| GI          | 5091516  | Score   | 1517                 |
| Exons       | 6679..7539, 7716..7751   |         |                      |
| GI Descrip. | (AB023482) ESTs C72761(E2193), AU056875(S20945), AU056876(S20945) correspond to a region of the predicted gene.; Similar to Thermus thermophilus gene for homocitrate synthase, homoaconitate hydratase, and ORF, complete and part... |         |                      |

  

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22733                              | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No. | 47273                              | Strand  | -                    |
| Start    | 6676                               | End     | 8885                 |
| Name     | OJ990525_07.9A15.C30.o2.tc         | Method  | TBLASTX:Cress        |
| Start    | 6694                               | End     | 6934                 |
| GI       | none                               | Score   | 69                   |
| Exons    | 6694..6933, 6721..6915, 6728..6934 |         |                      |

  

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22733                      | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No. | 47273                      | Strand  | -                    |
| Start    | 6676                       | End     | 8885                 |
| Name     | OJ990525_07.9A15.C30.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 6946                       | End     | 7263                 |
| GI       | none                       | Score   | 228                  |
| Exons    | 6946..7263                 |         |                      |

  

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22733  | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No. | 47273  | Strand  | -                    |
| Start    | 6676   | End     | 8885                 |
| Name     | OJ990525_07.9A15.C30.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 6983   | End     | 7540                 |
| GI       | none   | Score   | 110                  |
| Exons    | 6983..7102, 6984..7103, 6987..7538, 6988..7206, 6988..7539, 7175..7540, 7179..7499, 7229..7540 |         |                      |

  

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22733  | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No. | 47273  | Strand  | -                    |
| Start    | 6676   | End     | 8885                 |
| Name     | OJ990525_07.9A15.C30.o1.tc                     | Method  | TBLASTX:Cress        |
| Start    | 7204   | End     | 7503                 |
| GI       | none   | Score   | 73                   |
| Exons    | 7204..7362, 7238..7360, 7369..7503, 7396..7437 |         |                      |

  

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22733                              | Seq. ID | OJ990525_07.9A15.C30 |
| Gene No. | 47273                              | Strand  | -                    |
| Start    | 6676                               | End     | 8885                 |
| Name     | OJ990525_07.9A15.C30.o2.gp         | Method  | AAT/GAP              |
| Start    | 7244                               | End     | 8708                 |
| GI       | LIB3477-004-P1-K1-D10              | Score   | 775                  |
| Exons    | 7244..7539, 7716..7792, 8651..8708 |         |                      |

GI Descrip. '5091516/dbj|BAA78751.1| 4.0e-58 (AB023482) ESTs  
C72761(E2193), AU056875(S20945), AU056876(S20945) correspond to a  
region of the predicted gene.; Similar to Thermus thermophilus  
gene for homocitrate synthase, homoaconitate hydratase, and  
ORF, complete and part'

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22734                      | Seq. ID | OJ990525_07.9A15.C31 |
| Gene No. | 47274                      | Strand  | +                    |
| Start    | 543                        | End     | 1239                 |
| Name     | OJ990525_07.9A15.C31.o1.gs | Method  | GENSCAN              |
| Start    | 543                        | End     | 1239                 |
| GI       | none                       | Score   | .87                  |
| Exons    | 543..585, 1002..1239       |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22734   | Seq. ID | OJ990525_07.9A15.C31 |
| Gene No.    | 47275   | Strand  | +                    |
| Start       | 3079  | End     | 3327                 |
| Name        | OJ990525_07.9A15.C31.o1.gp  | Method  | AAT/GAP              |
| Start       | 3079  | End     | 3327                 |
| GI          | 3761181   | Score   | 406                  |
| Exons       | 3079..3327  |         |                      |
| GI Descrip. | 4521193/dbj AB013450.1 AB013450 1.0e-99 Oryza sativa DNA,<br>similar sequence to Pib gene |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22734                      | Seq. ID | OJ990525_07.9A15.C31 |
| Gene No. | 47276                      | Strand  | -                    |
| Start    | 3015                       | End     | 3594                 |
| Name     | OJ990525_07.9A15.C31.o2.gs | Method  | GENSCAN              |
| Start    | 3015                       | End     | 3594                 |
| GI       | none                       | Score   | .66                  |
| Exons    | 3015..3034, 3297..3594     |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22735  | Seq. ID | OJ990525_07.9A15.C32 |
| Gene No.    | 47277  | Strand  | +                    |
| Start       | 1  | End     | 2445                 |
| Name        | OJ990525_07.9A15.C32.o1.np                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 2445                 |
| GI          | 5091513  | Score   | 2487                 |
| Exons       | 1..1380, 2134..2445                            |         |                      |
| GI Descrip. | (AB023482) Hypothetical protein [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22736   | Seq. ID | OJ990525_07.9A15.C33 |
| Gene No. | 47278   | Strand  | +                    |
| Start    | 131   | End     | 3627                 |
| Name     | OJ990525_07.9A15.C33.o1.gs                              | Method  | GENSCAN              |
| Start    | 131   | End     | 3627                 |
| GI       | none  | Score   | .56                  |
| Exons    | 131..650, 705..1087, 1217..1507, 1974..1995, 3515..3627 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22736   | Seq. ID | OJ990525_07.9A15.C33 |
| Gene No.    | 47279   | Strand  | +                    |
| Start       | 6551  | End     | 6893                 |
| Name        | OJ990525_07.9A15.C33.o2.np                                | Method  | AAT/NAP              |
| Start       | 6551  | End     | 6893                 |
| GI          | 5091511   | Score   | 480                  |
| Exons       | 6551..6893  |         |                      |
| GI Descrip. | (AB023482) Similar to Arabidopsis thaliana RING-H2 finger |         |                      |

protein RHX1a mRNA, partial cds.(AF079184) [Oryza sativa]

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22736  | Seq. ID | OJ990525_07.9A15.C33 |
| Gene No.    | 47280  | Strand  | -                    |
| Start       | 1  | End     | 601                  |
| Name        | OJ990525_07.9A15.C33.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 601                  |
| GI          | 5091512  | Score   | 753                  |
| Exons       | 1..382, 423..601   |         |                      |
| GI Descrip. | (AB023482) Similar to Plasmodium vivax circumsporozoite protein gene, complete cds.(M11926) [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22737   | Seq. ID | OJ990525_07.9A15.C34 |
| Gene No.    | 47281   | Strand  | +                    |
| Start       | 1   | End     | 558                  |
| Name        | OJ990525_07.9A15.C34.o1.np  | Method  | AAT/NAP              |
| Start       | 1   | End     | 555                  |
| GI          | 5091511   | Score   | 930                  |
| Exons       | 1..555  |         |                      |
| GI Descrip. | (AB023482) Similar to Arabidopsis thaliana RING-H2 finger protein RHX1a mRNA, partial cds.(AF079184) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22737                      | Seq. ID | OJ990525_07.9A15.C34 |
| Gene No. | 47281                      | Strand  | +                    |
| Start    | 1                          | End     | 558                  |
| Name     | OJ990525_07.9A15.C34.o1.gs | Method  | GENSCAN              |
| Start    | 37                         | End     | 558                  |
| GI       | none                       | Score   | 1                    |
| Exons    | 37..558                    |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22737  | Seq. ID | OJ990525_07.9A15.C34 |
| Gene No. | 47282  | Strand  | -                    |
| Start    | 1812   | End     | 5415                 |
| Name     | OJ990525_07.9A15.C34.o2.gs                                 | Method  | GENSCAN              |
| Start    | 1812   | End     | 5247                 |
| GI       | none   | Score   | .64                  |
| Exons    | 1812..1940, 2941..3017, 3675..3717, 4438..4542, 5075..5247 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22737   | Seq. ID | OJ990525_07.9A15.C34 |
| Gene No.    | 47282   | Strand  | -                    |
| Start       | 1812  | End     | 5415                 |
| Name        | OJ990525_07.9A15.C34.o2.np  | Method  | AAT/NAP              |
| Start       | 1815  | End     | 5247                 |
| GI          | 5091510   | Score   | 763                  |
| Exons       | 1815..1940, 2941..3017, 3675..3717, 4438..4542, 5075..5247  |         |                      |
| GI Descrip. | (AB023482) Similar to Arabidopsis thaliana gamma-adaptin 1 mRNA, complete cds.(AF061286) [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22737   | Seq. ID | OJ990525_07.9A15.C34 |
| Gene No. | 47282   | Strand  | -                    |
| Start    | 1812  | End     | 5415                 |
| Name     | OJ990525_07.9A15.C34.o1.tm  | Method  | TBLASTX:Maize        |
| Start    | 3428  | End     | 5415                 |
| GI       | none  | Score   | 66                   |
| Exons    | 3428..3496, 3429..3497, 3502..3567, 3567..3719, 3588..3719, 3622..3732, 4437..4532, 4438..4545, 4439..4543, 5069..5251, 5075..5248, 5306..5380, 5333..5377, 5334..5414, 5344..5415, |         |                      |

5344..5412, 5382..5414

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22737   | Seq. ID | OJ990525_07.9A15.C34 |
| Gene No.    | 47282   | Strand  | -                    |
| Start       | 1812  | End     | 5415                 |
| Name        | OJ990525_07.9A15.C34.o1.gp  | Method  | AAT/GAP              |
| Start       | 3595  | End     | 4537                 |
| GI          | 2796377   | Score   | 283                  |
| Exons       | 3595..3717, 4438..4537  |         |                      |
| GI Descrip. | 5091510/dbj BAA78745.1  3.0e-14 (AB023482) Similar to Arabidopsis thaliana gamma-adaptin 1 mRNA, complete cds.(AF061286) [Oryza sativa] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22737  | Seq. ID | OJ990525_07.9A15.C34 |
| Gene No. | 47282  | Strand  | -                    |
| Start    | 1812   | End     | 5415                 |
| Name     | OJ990525_07.9A15.C34.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 3637   | End     | 5248                 |
| GI       | none   | Score   | 76                   |
| Exons    | 3637..3720, 3637..3720, 4438..4488, 4442..4489, 4486..4545, 4490..4534, 5069..5248, 5079..5234 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22738  | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No.    | 47283  | Strand  | -                    |
| Start       | 1  | End     | 7308                 |
| Name        | OJ990525_07.9A15.C35.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 7127                 |
| GI          | 5091510  | Score   | 3102                 |
| Exons       | 1..422, 1196..1323, 1774..1869, 1963..2085, 2184..2238, 2843..3006, 3430..3520, 4310..4509, 4811..4990, 6040..6213, 6589..6777, 6861..7127 |         |                      |
| GI Descrip. | (AB023482) Similar to Arabidopsis thaliana gamma-adaptin 1 mRNA, complete cds.(AF061286) [Oryza sativa]                                    |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22738   | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No. | 47283   | Strand  | -                    |
| Start    | 1   | End     | 7308                 |
| Name     | OJ990525_07.9A15.C35.o1.gs  | Method  | GENSCAN              |
| Start    | 40  | End     | 7127                 |
| GI       | none  | Score   | .79                  |
| Exons    | 40..422, 1196..1323, 1774..1869, 1963..2085, 2902..3006, 3430..3520, 4310..4509, 4811..4990, 6040..6213, 6589..6777, 6861..7127 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22738  | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No. | 47283  | Strand  | -                    |
| Start    | 1  | End     | 7308                 |
| Name     | OJ990525_07.9A15.C35.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 131  | End     | 2934                 |
| GI       | none   | Score   | 75                   |
| Exons    | 131..187, 132..188, 148..429, 150..428, 467..622, 515..625, 517..627, 528..623, 1195..1293, 1196..1285, 1774..1869, 1775..1870, 1961..2086, 1963..2085, 2177..2236, 2182..2238, 2184..2255, 2185..2256, 2841..2924, 2842..2931, 2842..2934 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22738 | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No. | 47283 | Strand  | -                    |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 1  | End    | 7308          |
| Name  | OJ990525_07.9A15.C35.o1.tc   | Method | TBLASTX:Cress |
| Start | 140  | End    | 7261          |
| GI    | none   | Score  | 131           |
| Exons | 140..184, 287..424, 517..630, 1198..1332, 1724..1870, 1764..1847, 1768..1869, 1771..1872, 1961..2086, 1961..2086, 1962..2087, 1963..2088, 1963..2088, 2190..2255, 2193..2237, 2842..3021, 2842..3024, 3428..3523, 3430..3534, 3430..3522, 4307..4468, 4309..4467, 4311..4481, 4311..4472, 4808..4987, 4809..4991, 6043..6213, 6044..6217, 6089..6214, 6589..6753, 6590..6730, 6645..6731, 6825..6998, 6828..7133, 6829..7134, 7228..7260, 7232..7261 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22738  | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No. | 47283  | Strand  | -                    |
| Start    | 1  | End     | 7308                 |
| Name     | OJ990525_07.9A15.C35.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 1219   | End     | 2076                 |
| GI       | none   | Score   | 131                  |
| Exons    | 1219..1332, 1694..1870, 1765..1872, 1768..1869, 1961..2074, 1963..2076 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22738                              | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No. | 47283                              | Strand  | -                    |
| Start    | 1                                  | End     | 7308                 |
| Name     | OJ990525_07.9A15.C35.o4.ts         | Method  | TBLASTX:Soybean      |
| Start    | 2839                               | End     | 3480                 |
| GI       | none                               | Score   | 95                   |
| Exons    | 2839..3009, 2842..3009, 3430..3480 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22738  | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No. | 47283  | Strand  | -                    |
| Start    | 1  | End     | 7308                 |
| Name     | OJ990525_07.9A15.C35.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 3428   | End     | 6183                 |
| GI       | none   | Score   | 143                  |
| Exons    | 3428..3523, 3429..3521, 3430..3522, 4298..4465, 4307..4465, 4309..4467, 4315..4467, 4805..5002, 4809..4991, 6039..6140, 6040..6183, 6040..6180 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22738  | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No. | 47283  | Strand  | -                    |
| Start    | 1  | End     | 7308                 |
| Name     | OJ990525_07.9A15.C35.o2.ts                     | Method  | TBLASTX:Soybean      |
| Start    | 4409   | End     | 4981                 |
| GI       | none   | Score   | 98                   |
| Exons    | 4409..4468, 4411..4467, 4808..4981, 4809..4979 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22738  | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No. | 47283  | Strand  | -                    |
| Start    | 1  | End     | 7308                 |
| Name     | OJ990525_07.9A15.C35.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 6034   | End     | 6732                 |
| GI       | none   | Score   | 116                  |
| Exons    | 6034..6207, 6040..6213, 6071..6214, 6107..6217, 6575..6730, 6589..6732, 6590..6730 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22738                              | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No. | 47283                              | Strand  | -                    |
| Start    | 1                                  | End     | 7308                 |
| Name     | OJ990525_07.9A15.C35.o4.tm         | Method  | TBLASTX:Maize        |
| Start    | 6588                               | End     | 6733                 |
| GI       | none                               | Score   | 177                  |
| Exons    | 6588..6731, 6589..6732, 6590..6733 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22738  | Seq. ID | OJ990525_07.9A15.C35 |
| Gene No. | 47283  | Strand  | -                    |
| Start    | 1  | End     | 7308                 |
| Name     | OJ990525_07.9A15.C35.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 6852   | End     | 7308                 |
| GI       | none   | Score   | 187                  |
| Exons    | 6852..7046, 6852..7133, 6892..7131, 7226..7306, 7228..7308 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22739  | Seq. ID | OJ990525_07.9A15.C36 |
| Gene No. | 47284  | Strand  | +                    |
| Start    | 1935   | End     | 6523                 |
| Name     | OJ990525_07.9A15.C36.o1.np   | Method  | AAT/NAP              |
| Start    | 1935   | End     | 6523                 |
| GI       | 5091509  | Score   | 4671                 |
| Exons    | 1935..2215, 2949..3072, 3186..3278, 3451..3841, 4593..5082, 5193..6523 |         |                      |

GI Descrip. (AB023482) EST AU065533(C2174) corresponds to a region of the predicted gene.; Similar to Homo sapiens splicing factor Prp8 mRNA, complete cds.(AF092565) [Oryza sativa]

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22739  | Seq. ID | OJ990525_07.9A15.C36 |
| Gene No. | 47284  | Strand  | +                    |
| Start    | 1935   | End     | 6523                 |
| Name     | OJ990525_07.9A15.C36.o1.gs   | Method  | GENSCAN              |
| Start    | 1968   | End     | 6447                 |
| GI       | none   | Score   | .73                  |
| Exons    | 1968..2215, 2949..3072, 3186..3278, 3451..3841, 4593..5082, 5193..6447 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22739                      | Seq. ID | OJ990525_07.9A15.C36 |
| Gene No. | 47284                      | Strand  | +                    |
| Start    | 1935                       | End     | 6523                 |
| Name     | OJ990525_07.9A15.C36.o3.tc | Method  | TBLASTX:Cress        |
| Start    | 2075                       | End     | 2201                 |
| GI       | none                       | Score   | 196                  |
| Exons    | 2075..2200, 2076..2201     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22739  | Seq. ID | OJ990525_07.9A15.C36 |
| Gene No. | 47284  | Strand  | +                    |
| Start    | 1935   | End     | 6523                 |
| Name     | OJ990525_07.9A15.C36.o2.tc   | Method  | TBLASTX:Cress        |
| Start    | 2971   | End     | 3642                 |
| GI       | none   | Score   | 167                  |
| Exons    | 2971..3075, 2971..3072, 2985..3074, 3176..3274, 3183..3278, 3448..3468, 3448..3642, 3495..3557, 3547..3642 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22739 | Seq. ID | OJ990525_07.9A15.C36 |
| Gene No. | 47284 | Strand  | +                    |
| Start    | 1935  | End     | 6523                 |

|       |                                    |        |               |
|-------|------------------------------------|--------|---------------|
| Name  | OJ990525_07.9A15.C36.o1.tc         | Method | TBLASTX:Cress |
| Start | 4586                               | End    | 4858          |
| GI    | none                               | Score  | 462           |
| Exons | 4586..4858, 4591..4794, 4697..4858 |        |               |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22739  | Seq. ID | OJ990525_07.9A15.C36 |
| Gene No. | 47284  | Strand  | +                    |
| Start    | 1935   | End     | 6523                 |
| Name     | OJ990525_07.9A15.C36.o2.tm                     | Method  | TBLASTX:Maize        |
| Start    | 5495   | End     | 5691                 |
| GI       | none   | Score   | 127                  |
| Exons    | 5495..5674, 5499..5690, 5499..5657, 5500..5691 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22739  | Seq. ID | OJ990525_07.9A15.C36 |
| Gene No. | 47284  | Strand  | +                    |
| Start    | 1935   | End     | 6523                 |
| Name     | OJ990525_07.9A15.C36.o1.tm                     | Method  | TBLASTX:Maize        |
| Start    | 5965   | End     | 6209                 |
| GI       | none   | Score   | 388                  |
| Exons    | 5965..6189, 5967..6209, 5984..6193, 5988..6200 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22740  | Seq. ID | OJ990525_07.9A15.C37 |
| Gene No.    | 47285  | Strand  | +                    |
| Start       | 1  | End     | 1069                 |
| Name        | OJ990525_07.9A15.C37.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 1069                 |
| GI          | 5091509  | Score   | 1637                 |
| Exons       | 1..1069  |         |                      |
| GI Descrip. | (AB023482) EST AU065533(C2174) corresponds to a region of the predicted gene.; Similar to Homo sapiens splicing factor Prp8 mRNA, complete cds.(AF092565) [Oryza sativa] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22740   | Seq. ID | OJ990525_07.9A15.C37 |
| Gene No. | 47285   | Strand  | +                    |
| Start    | 1   | End     | 1069                 |
| Name     | OJ990525_07.9A15.C37.o2.ts                      | Method  | TBLASTX:Soybean      |
| Start    | 7   | End     | 264                  |
| GI       | none  | Score   | 306                  |
| Exons    | 7..246, 7..81, 8..247, 9..251, 9..254, 121..264 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22740                              | Seq. ID | OJ990525_07.9A15.C37 |
| Gene No. | 47285                              | Strand  | +                    |
| Start    | 1                                  | End     | 1069                 |
| Name     | OJ990525_07.9A15.C37.o2.tm         | Method  | TBLASTX:Maize        |
| Start    | 20                                 | End     | 293                  |
| GI       | none                               | Score   | 323                  |
| Exons    | 20..292, 21..293, 22..291, 30..293 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22740                      | Seq. ID | OJ990525_07.9A15.C37 |
| Gene No. | 47285                      | Strand  | +                    |
| Start    | 1                          | End     | 1069                 |
| Name     | OJ990525_07.9A15.C37.o1.gs | Method  | GENSCAN              |
| Start    | 49                         | End     | 489                  |
| GI       | none                       | Score   | .87                  |
| Exons    | 49..489                    |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22740 | Seq. ID | OJ990525_07.9A15.C37 |
|----------|-------|---------|----------------------|

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Gene No.    | 47285  | Strand  | +                    |
| Start       | 1  | End     | 1069                 |
| Name        | OJ990525_07.9A15.C37.o1.tc   | Method  | TBLASTX:Cress        |
| Start       | 282  | End     | 485                  |
| GI          | none   | Score   | 321                  |
| Exons       | 282..485, 283..483, 287..484   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22740  | Seq. ID | OJ990525_07.9A15.C37 |
| Gene No.    | 47285  | Strand  | +                    |
| Start       | 1  | End     | 1069                 |
| Name        | OJ990525_07.9A15.C37.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 359  | End     | 1018                 |
| GI          | none   | Score   | 172                  |
| Exons       | 359..544, 362..538, 363..545, 364..543, 602..1018, 607..1017                             |         |                      |
|             |  |         |                      |
| Seq. No.    | 22740  | Seq. ID | OJ990525_07.9A15.C37 |
| Gene No.    | 47285  | Strand  | +                    |
| Start       | 1  | End     | 1069                 |
| Name        | OJ990525_07.9A15.C37.o1.ts   | Method  | TBLASTX:Soybean      |
| Start       | 591  | End     | 823                  |
| GI          | none   | Score   | 343                  |
| Exons       | 591..818, 602..823, 607..819   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22740  | Seq. ID | OJ990525_07.9A15.C37 |
| Gene No.    | 47285  | Strand  | +                    |
| Start       | 1  | End     | 1069                 |
| Name        | OJ990525_07.9A15.C37.o1.gp   | Method  | AAT/GAP              |
| Start       | 642  | End     | 1018                 |
| GI          | uC-osrocyp008b07b1   | Score   | 716                  |
| Exons       | 642..1018  |         |                      |
| GI Descrip. | '4521193/dbj AB013450.1 AB013450 1.0e-99 Oryza sativa DNA, similar sequence to Pib gene' |         |                      |
|             |  |         |                      |
| Seq. No.    | 22741  | Seq. ID | OJ990525_07.9A15.C40 |
| Gene No.    | 47286  | Strand  | +                    |
| Start       | 1  | End     | 750                  |
| Name        | OJ990525_07.9A15.C40.o2.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 700                  |
| GI          | 3176710  | Score   | 122                  |
| Exons       | 1..99, 534..700  |         |                      |
| GI Descrip. | (AC002392) unknown protein [Arabidopsis thaliana]  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22741  | Seq. ID | OJ990525_07.9A15.C40 |
| Gene No.    | 47286  | Strand  | +                    |
| Start       | 1  | End     | 750                  |
| Name        | OJ990525_07.9A15.C40.o1.gp   | Method  | AAT/GAP              |
| Start       | 534  | End     | 750                  |
| GI          | 20314_1.R1084  | Score   | 344                  |
| Exons       | 534..750   |         |                      |
| GI Descrip. | '3176710 2.0e-15 (AC002392) unknown protein [Arabidopsis thaliana]'                      |         |                      |
|             |  |         |                      |
| Seq. No.    | 22741  | Seq. ID | OJ990525_07.9A15.C40 |
| Gene No.    | 47287  | Strand  | -                    |
| Start       | 1  | End     | 805                  |
| Name        | OJ990525_07.9A15.C40.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 805                  |



GI 5091523 Score 425  
 Exons 1..264, 721..805  
 GI Descrip. (AB023482) Similar to Gallus gallus mRNA for attachment region binding protein (ARBP).(Y14166) [Oryza sativa]

Seq. No. 22742 Seq. ID OJ990525\_07.9A15.C45  
 Gene No. 47288 Strand +  
 Start 125 End 877  
 Name OJ990525\_07.9A15.C45.ol.gs Method GENSCAN  
 Start 125 End 743  
 GI none Score .66  
 Exons 125..743

Seq. No. 22742 Seq. ID OJ990525\_07.9A15.C45  
 Gene No. 47288 Strand +  
 Start 125 End 877  
 Name OJ990525\_07.9A15.C45.ol.np Method AAT/NAP  
 Start 146 End 877  
 GI 5091513 Score 931  
 Exons 146..877  
 GI Descrip. (AB023482) Hypothetical protein [Oryza sativa]

Seq. No. 22743 Seq. ID OJ990525\_07.9A15.C46  
 Gene No. 47289 Strand +  
 Start 1 End 501  
 Name OJ990525\_07.9A15.C46.ol.np Method AAT/NAP  
 Start 1 End 501  
 GI 3661603 Score 286  
 Exons 1..92, 173..259, 349..501  
 GI Descrip. (AF092841) ribonucleoside-diphosphate reductase large subunit [Arabidopsis thaliana]

Seq. No. 22743 Seq. ID OJ990525\_07.9A15.C46  
 Gene No. 47289 Strand +  
 Start 1 End 501  
 Name OJ990525\_07.9A15.C46.ol.tm Method TBLASTX:Maize  
 Start 56 End 473  
 GI none Score 57  
 Exons 56..94, 57..92, 59..100, 153..260, 162..260, 163..261, 176..262, 346..471, 346..471, 347..472, 348..473

Seq. No. 22743 Seq. ID OJ990525\_07.9A15.C46  
 Gene No. 47289 Strand +  
 Start 1 End 501  
 Name OJ990525\_07.9A15.C46.ol.ts Method TBLASTX:Soybean  
 Start 56 End 471  
 GI none Score 54  
 Exons 56..91, 57..92, 170..292, 171..245, 172..258, 346..471, 346..462, 351..470

Seq. No. 22743 Seq. ID OJ990525\_07.9A15.C46  
 Gene No. 47289 Strand +  
 Start 1 End 501  
 Name OJ990525\_07.9A15.C46.ol.tc Method TBLASTX:Cress  
 Start 57 End 482  
 GI none Score 57  
 Exons 57..92, 57..92, 59..94, 170..274, 172..261, 346..471, 348..482

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22744  | Seq. ID | OJ990525_07.9A15.C47 |
| Gene No.    | 47290  | Strand  | +                    |
| Start       | 1  | End     | 784                  |
| Name        | OJ990525_07.9A15.C47.ol.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 784                  |
| GI          | 5091510  | Score   | 110                  |
| Exons       | 1..37, 211..315, 699..784  |         |                      |
| GI Descrip. | (AB023482) Similar to Arabidopsis thaliana gamma-adaptin 1 mRNA, complete cds. (AF061286) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22744                      | Seq. ID | OJ990525_07.9A15.C47 |
| Gene No. | 47290                      | Strand  | +                    |
| Start    | 1                          | End     | 784                  |
| Name     | OJ990525_07.9A15.C47.ol.gs | Method  | GENSCAN              |
| Start    | 211                        | End     | 315                  |
| GI       | none                       | Score   | .47                  |
| Exons    | 211..315                   |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22744  | Seq. ID | OJ990525_07.9A15.C47 |
| Gene No.    | 47290  | Strand  | +                    |
| Start       | 1  | End     | 784                  |
| Name        | OJ990525_07.9A15.C47.ol.gp   | Method  | AAT/GAP              |
| Start       | 216  | End     | 315                  |
| GI          | 2796377  | Score   | 171                  |
| Exons       | 216..315   |         |                      |
| GI Descrip. | 5091510/dbj BAA78745.1  3.0e-14 (AB023482) Similar to Arabidopsis thaliana gamma-adaptin 1 mRNA, complete cds. (AF061286) [Oryza sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22745                      | Seq. ID | OJ990525_07.9A15.C49 |
| Gene No. | 47291                      | Strand  | -                    |
| Start    | 22                         | End     | 313                  |
| Name     | OJ990525_07.9A15.C49.ol.gs | Method  | GENSCAN              |
| Start    | 22                         | End     | 313                  |
| GI       | none                       | Score   | .73                  |
| Exons    | 22..313                    |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22746   | Seq. ID | OJ990525_07.9A15.C50 |
| Gene No.    | 47292   | Strand  | +                    |
| Start       | 1   | End     | 591                  |
| Name        | OJ990525_07.9A15.C50.ol.gp  | Method  | AAT/GAP              |
| Start       | 1   | End     | 535                  |
| GI          | LIB3477-004-P1-K1-D10   | Score   | 682                  |
| Exons       | 1..63, 240..535   |         |                      |
| GI Descrip. | '5091516/dbj BAA78751.1  4.0e-58 (AB023482) ESTs C72761(E2193), AU056875(S20945), AU056876(S20945) correspond to a region of the predicted gene.; Similar to Thermus thermophilus gene for homocitrate synthase, homoaconitate hydratase, and ORF, complete and part' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22746                      | Seq. ID | OJ990525_07.9A15.C50 |
| Gene No. | 47292                      | Strand  | +                    |
| Start    | 1                          | End     | 591                  |
| Name     | OJ990525_07.9A15.C50.ol.np | Method  | AAT/NAP              |
| Start    | 28                         | End     | 591                  |
| GI       | 5091516                    | Score   | 589                  |

Exons 28..63, 240..591  
 GI Descrip. (AB023482) ESTs C72761(E2193), AU056875(S20945), AU056876(S20945) correspond to a region of the predicted gene.; Similar to Thermus thermophilus gene for homocitrate synthase, homoaconitate hydratase, and ORF, complete and part...

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22746                                  | Seq. ID | OJ990525_07.9A15.C50 |
| Gene No. | 47293                                  | Strand  | -                    |
| Start    | 267                                    | End     | 591                  |
| Name     | OJ990525_07.9A15.C50.o1.tm             | Method  | TBLASTX:Maize        |
| Start    | 239                                    | End     | 591                  |
| GI       | none                                   | Score   | 498                  |
| Exons    | 239..550, 240..590, 241..591, 246..587 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22746                      | Seq. ID | OJ990525_07.9A15.C50 |
| Gene No. | 47293                      | Strand  | -                    |
| Start    | 267                        | End     | 591                  |
| Name     | OJ990525_07.9A15.C50.o1.gs | Method  | GENSCAN              |
| Start    | 267                        | End     | 466                  |
| GI       | none                       | Score   | .4                   |
| Exons    | 267..466                   |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22746                      | Seq. ID | OJ990525_07.9A15.C50 |
| Gene No. | 47293                      | Strand  | -                    |
| Start    | 267                        | End     | 591                  |
| Name     | OJ990525_07.9A15.C50.o1.tc | Method  | TBLASTX:Cress        |
| Start    | 276                        | End     | 575                  |
| GI       | none                       | Score   | 115                  |
| Exons    | 276..410, 417..575         |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22746                      | Seq. ID | OJ990525_07.9A15.C50 |
| Gene No. | 47293                      | Strand  | -                    |
| Start    | 267                        | End     | 591                  |
| Name     | OJ990525_07.9A15.C50.o1.ts | Method  | TBLASTX:Soybean      |
| Start    | 324                        | End     | 575                  |
| GI       | none                       | Score   | 175                  |
| Exons    | 324..575                   |         |                      |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22747   | Seq. ID | OJ990505_06.9A11.C3 |
| Gene No.    | 47294   | Strand  | -                   |
| Start       | 570   | End     | 726                 |
| Name        | OJ990505_06.9A11.C3.o1.gp   | Method  | AAT/GAP             |
| Start       | 570   | End     | 726                 |
| GI          | uC-osflcyp030f12b1  | Score   | 278                 |
| Exons       | 570..726  |         |                     |
| GI Descrip. | '3540181 4.0e-12 (AC004122) Unknown protein [Arabidopsis thaliana]' |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22748   | Seq. ID | OJ990505_06.9A11.C5 |
| Gene No.    | 47295   | Strand  | +                   |
| Start       | 1   | End     | 432                 |
| Name        | OJ990505_06.9A11.C5.o1.gp   | Method  | AAT/GAP             |
| Start       | 1   | End     | 342                 |
| GI          | 5003042   | Score   | 647                 |
| Exons       | 1..342  |         |                     |
| GI Descrip. | 3540181 4.0e-12 (AC004122) Unknown protein [Arabidopsis thaliana] |         |                     |

|          |   |         |                     |
|----------|---|---------|---------------------|
| Seq. No. | 22748   | Seq. ID | OJ990505_06.9A11.C5 |
| Gene No. | 47295   | Strand  | +                   |
| Start    | 1   | End     | 432                 |
| Name     | OJ990505_06.9A11.C5.ol.tm                                       | Method  | TBLASTX:Maize       |
| Start    | 19  | End     | 263                 |
| GI       | none  | Score   | 118                 |
| Exons    | 19..72, 20..172, 20..175, 30..251, 144..212, 183..263, 230..262 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22748  | Seq. ID | OJ990505_06.9A11.C5 |
| Gene No. | 47295  | Strand  | +                   |
| Start    | 1  | End     | 432                 |
| Name     | OJ990505_06.9A11.C5.ol.ts                    | Method  | TBLASTX:Soybean     |
| Start    | 29   | End     | 431                 |
| GI       | none   | Score   | 84                  |
| Exons    | 29..85, 30..86, 126..212, 240..293, 342..431 |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22748   | Seq. ID | OJ990505_06.9A11.C5 |
| Gene No.    | 47295   | Strand  | +                   |
| Start       | 1   | End     | 432                 |
| Name        | OJ990505_06.9A11.C5.ol.np                         | Method  | AAT/NAP             |
| Start       | 33  | End     | 432                 |
| GI          | 3540181   | Score   | 228                 |
| Exons       | 33..432   |         |                     |
| GI Descrip. | (AC004122) Unknown protein [Arabidopsis thaliana] |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22749                     | Seq. ID | OJ990505_06.9A11.C6 |
| Gene No. | 47296                     | Strand  | -                   |
| Start    | 463                       | End     | 806                 |
| Name     | OJ990505_06.9A11.C6.ol.gs | Method  | GENSCAN             |
| Start    | 463                       | End     | 753                 |
| GI       | none                      | Score   | .52                 |
| Exons    | 463..499, 692..753        |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22749   | Seq. ID | OJ990505_06.9A11.C6 |
| Gene No.    | 47296   | Strand  | -                   |
| Start       | 463   | End     | 806                 |
| Name        | OJ990505_06.9A11.C6.ol.gp   | Method  | AAT/GAP             |
| Start       | 479   | End     | 806                 |
| GI          | 2508_1.R1084  | Score   | 607                 |
| Exons       | 479..806  |         |                     |
| GI Descrip. | '3402817/emb CAA07704  2.0e-35 (AJ007829) lacZ'' [Cloning vector pGreen]' |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22750  | Seq. ID | OJ990505_06.9A11.C9 |
| Gene No.    | 47297  | Strand  | -                   |
| Start       | 1095   | End     | 1781                |
| Name        | OJ990505_06.9A11.C9.ol.gp  | Method  | AAT/GAP             |
| Start       | 1095   | End     | 1633                |
| GI          | 21272_1.R1084  | Score   | 441                 |
| Exons       | 1095..1310, 1394..1485, 1578..1633   |         |                     |
| GI Descrip. | '1076670/pir  S52386 1.0e-50 NADH dehydrogenase (EC 1.6.99.3) - potato >gi_668985_emb_CAA59062_ (X84319) NADH dehydrogenase [Solanum tuberosum]' |         |                     |

|          |       |         |                     |
|----------|-------|---------|---------------------|
| Seq. No. | 22750 | Seq. ID | OJ990505_06.9A11.C9 |
| Gene No. | 47297 | Strand  | -                   |

|       |  |        |               |
|-------|--|--------|---------------|
| Start | 1095   | End    | 1781          |
| Name  | OJ990505_06.9A11.C9.o1.tc  | Method | TBLASTX:Cress |
| Start | 1191   | End    | 1538          |
| GI    | none   | Score  | 133           |
| Exons | 1191..1310, 1194..1328, 1195..1311, 1385..1489, 1389..1538, 1395..1490 |        |               |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22750  | Seq. ID | OJ990505_06.9A11.C9 |
| Gene No. | 47297  | Strand  | -                   |
| Start    | 1095   | End     | 1781                |
| Name     | OJ990505_06.9A11.C9.o1.ts  | Method  | TBLASTX:Soybean     |
| Start    | 1191   | End     | 1538                |
| GI       | none   | Score   | 110                 |
| Exons    | 1191..1310, 1194..1328, 1198..1311, 1385..1492, 1388..1483, 1389..1538 |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22750  | Seq. ID | OJ990505_06.9A11.C9 |
| Gene No. | 47297  | Strand  | -                   |
| Start    | 1095   | End     | 1781                |
| Name     | OJ990505_06.9A11.C9.o1.tm  | Method  | TBLASTX:Maize       |
| Start    | 1194   | End     | 1639                |
| GI       | none   | Score   | 112                 |
| Exons    | 1194..1310, 1194..1328, 1198..1311, 1385..1489, 1389..1538, 1580..1639 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22750                     | Seq. ID | OJ990505_06.9A11.C9 |
| Gene No. | 47297                     | Strand  | -                   |
| Start    | 1095                      | End     | 1781                |
| Name     | OJ990505_06.9A11.C9.o1.gs | Method  | GENSCAN             |
| Start    | 1197                      | End     | 1310                |
| GI       | none                      | Score   | .96                 |
| Exons    | 1197..1310                |         |                     |

|             |   |         |                     |
|-------------|---|---------|---------------------|
| Seq. No.    | 22750   | Seq. ID | OJ990505_06.9A11.C9 |
| Gene No.    | 47297   | Strand  | -                   |
| Start       | 1095  | End     | 1781                |
| Name        | OJ990505_06.9A11.C9.o1.np   | Method  | AAT/NAP             |
| Start       | 1197  | End     | 1781                |
| GI          | 6226880   | Score   | 325                 |
| Exons       | 1197..1310, 1394..1485, 1578..1781  |         |                     |
| GI Descrip. | NADH-UBIQUINONE OXIDOREDUCTASE 23 KD SUBUNIT PRECURSOR (COMPLEX I-23KD) (CI-23KD) (COMPLEX I-28.5KD) (CI-28.5KD)<br>gi 1076670 pir  S52386 NADH dehydrogenase (EC 1.6.99.3) - potato<br>gi 668985 emb CAA59062  (X84319) NADH dehydrogenase [Solanum tuberosum] |         |                     |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22751  | Seq. ID | OJ990505_06.9A11.C10 |
| Gene No.    | 47298  | Strand  | -                    |
| Start       | 1  | End     | 712                  |
| Name        | OJ990505_06.9A11.C10.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 712                  |
| GI          | 4914439  | Score   | 70                   |
| Exons       | 1..57, 452..602, 685..712  |         |                      |
| GI Descrip. | (AL050351) receptor protein kinase-like protein [Arabidopsis thaliana] |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22751 | Seq. ID | OJ990505_06.9A11.C10 |
|----------|-------|---------|----------------------|

|          |                              |        |               |
|----------|------------------------------|--------|---------------|
| Gene No. | 47298                        | Strand | -             |
| Start    | 1                            | End    | 712           |
| Name     | OJ990505_06.9A11.C10.o1.tm   | Method | TBLASTX:Maize |
| Start    | 426                          | End    | 587           |
| GI       | none                         | Score  | 148           |
| Exons    | 426..587, 450..581, 452..583 |        |               |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22752  | Seq. ID | OJ990505_06.9A11.C12 |
| Gene No.    | 47299  | Strand  | +                    |
| Start       | 1  | End     | 932                  |
| Name        | OJ990505_06.9A11.C12.o1.np                             | Method  | AAT/NAP              |
| Start       | 1  | End     | 643                  |
| GI          | 4883612  | Score   | 222                  |
| Exons       | 1..204, 461..643                                       |         |                      |
| GI Descrip. | (AC006922) hypothetical protein [Arabidopsis thaliana] |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22752                        | Seq. ID | OJ990505_06.9A11.C12 |
| Gene No. | 47299                        | Strand  | +                    |
| Start    | 1                            | End     | 932                  |
| Name     | OJ990505_06.9A11.C12.o1.gs   | Method  | GENSCAN              |
| Start    | 101                          | End     | 919                  |
| GI       | none                         | Score   | .74                  |
| Exons    | 101..204, 461..699, 792..919 |         |                      |

|          |                              |         |                      |
|----------|------------------------------|---------|----------------------|
| Seq. No. | 22752                        | Seq. ID | OJ990505_06.9A11.C12 |
| Gene No. | 47299                        | Strand  | +                    |
| Start    | 1                            | End     | 932                  |
| Name     | OJ990505_06.9A11.C12.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 148                          | End     | 703                  |
| GI       | none                         | Score   | 74                   |
| Exons    | 148..201, 455..703, 460..585 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22752  | Seq. ID | OJ990505_06.9A11.C12 |
| Gene No. | 47299  | Strand  | +                    |
| Start    | 1  | End     | 932                  |
| Name     | OJ990505_06.9A11.C12.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 535  | End     | 932                  |
| GI       | none   | Score   | 247                  |
| Exons    | 535..594, 536..706, 548..706, 550..708, 788..826, 789..818, 810..896, 823..897, 888..932, 903..932 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22753  | Seq. ID | OJ990505_06.9A11.C14 |
| Gene No.    | 47300  | Strand  | +                    |
| Start       | 1  | End     | 351                  |
| Name        | OJ990505_06.9A11.C14.o1.np                             | Method  | AAT/NAP              |
| Start       | 1  | End     | 342                  |
| GI          | 6561965  | Score   | 268                  |
| Exons       | 1..140, 247..342                                       |         |                      |
| GI Descrip. | (AL132964) kinesin-like protein [Arabidopsis thaliana] |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22753   | Seq. ID | OJ990505_06.9A11.C14 |
| Gene No. | 47300   | Strand  | +                    |
| Start    | 1   | End     | 351                  |
| Name     | OJ990505_06.9A11.C14.o1.tm                                    | Method  | TBLASTX:Maize        |
| Start    | 1   | End     | 351                  |
| GI       | none  | Score   | 36                   |
| Exons    | 1..24, 2..142, 22..141, 23..145, 24..155, 244..351, 244..345, |         |                      |

245..346

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22754  | Seq. ID | OJ990505_06.9A11.C16 |
| Gene No.    | 47301  | Strand  | -                    |
| Start       | 1  | End     | 701                  |
| Name        | OJ990505_06.9A11.C16.o1.gp   | Method  | AAT/GAP              |
| Start       | 1  | End     | 77                   |
| GI          | 1278 1.R1084   | Score   | 135                  |
| Exons       | 1..77  |         |                      |
| GI Descrip. | '3183079/sp Q42972 MDHG_ORYSA 1.0e-167 MALATE DEHYDROGENASE, GLYOXYSOMAL PRECURSOR >gi_1375075_dbj_BAA12870.1_ (D85763) glyoxysomal malate dehydrogenase [Oryza sativa]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22754   | Seq. ID | OJ990505_06.9A11.C16 |
| Gene No.    | 47301   | Strand  | -                    |
| Start       | 1   | End     | 701                  |
| Name        | OJ990505_06.9A11.C16.o1.np                                  | Method  | AAT/NAP              |
| Start       | 1   | End     | 701                  |
| GI          | 2827078   | Score   | 69                   |
| Exons       | 1..77, 675..701   |         |                      |
| GI Descrip. | (AF020270) malate dehydrogenase precursor [Medicago sativa] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22754                      | Seq. ID | OJ990505_06.9A11.C16 |
| Gene No. | 47301                      | Strand  | -                    |
| Start    | 1                          | End     | 701                  |
| Name     | OJ990505_06.9A11.C16.o2.gp | Method  | AAT/GAP              |
| Start    | 90                         | End     | 459                  |
| GI       | none                       | Score   | 690                  |
| Exons    | 90..459                    |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22755                      | Seq. ID | OJ990505_06.9A11.C17 |
| Gene No. | 47302                      | Strand  | +                    |
| Start    | 161                        | End     | 816                  |
| Name     | OJ990505_06.9A11.C17.o1.gs | Method  | GENSCAN              |
| Start    | 161                        | End     | 801                  |
| GI       | none                       | Score   | .67                  |
| Exons    | 161..403, 483..801         |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22755  | Seq. ID | OJ990505_06.9A11.C17 |
| Gene No.    | 47302  | Strand  | +                    |
| Start       | 161  | End     | 816                  |
| Name        | OJ990505_06.9A11.C17.o1.gp   | Method  | AAT/GAP              |
| Start       | 331  | End     | 816                  |
| GI          | LIB3434-038-P1-K1-A5   | Score   | 747                  |
| Exons       | 331..403, 483..816   |         |                      |
| GI Descrip. | '4883612/gb AAD31581.1 AC006922_13 6.0e-11 (AC006922) hypothetical protein [Arabidopsis thaliana]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22755  | Seq. ID | OJ990505_06.9A11.C17 |
| Gene No.    | 47302  | Strand  | +                    |
| Start       | 161  | End     | 816                  |
| Name        | OJ990505_06.9A11.C17.o1.np                             | Method  | AAT/NAP              |
| Start       | 506  | End     | 816                  |
| GI          | 4883612  | Score   | 97                   |
| Exons       | 506..816   |         |                      |
| GI Descrip. | (AC006922) hypothetical protein [Arabidopsis thaliana] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22756   | Seq. ID | OJ990505_06.9A11.C18 |
| Gene No.    | 47303   | Strand  | +                    |
| Start       | 1   | End     | 423                  |
| Name        | OJ990505_06.9A11.C18.o1.gp  | Method  | AAT/GAP              |
| Start       | 1   | End     | 312                  |
| GI          | 73153 1.R1084   | Score   | 565                  |
| Exons       | 1..312  |         |                      |
| GI Descrip. | '3540181 2.0e-31 (AC004122) Unknown protein [Arabidopsis thaliana]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22756   | Seq. ID | OJ990505_06.9A11.C18 |
| Gene No.    | 47303   | Strand  | +                    |
| Start       | 1   | End     | 423                  |
| Name        | OJ990505_06.9A11.C18.o1.np                        | Method  | AAT/NAP              |
| Start       | 1   | End     | 411                  |
| GI          | 3540181   | Score   | 286                  |
| Exons       | 1..411  |         |                      |
| GI Descrip. | (AC004122) Unknown protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22756                      | Seq. ID | OJ990505_06.9A11.C18 |
| Gene No. | 47303                      | Strand  | +                    |
| Start    | 1                          | End     | 423                  |
| Name     | OJ990505_06.9A11.C18.o1.gs | Method  | GENSCAN              |
| Start    | 70                         | End     | 423                  |
| GI       | none                       | Score   | .63                  |
| Exons    | 70..423                    |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22756   | Seq. ID | OJ990505_06.9A11.C18 |
| Gene No. | 47304   | Strand  | -                    |
| Start    | 1237  | End     | 1548                 |
| Name     | OJ990505_06.9A11.C18.o1.ts                            | Method  | TBLASTX:Soybean      |
| Start    | 1   | End     | 393                  |
| GI       | none  | Score   | 43                   |
| Exons    | 1..33, 31..120, 33..119, 211..393, 213..392, 241..393 |         |                      |

|          |                                |         |                      |
|----------|--------------------------------|---------|----------------------|
| Seq. No. | 22756                          | Seq. ID | OJ990505_06.9A11.C18 |
| Gene No. | 47304                          | Strand  | -                    |
| Start    | 1237                           | End     | 1548                 |
| Name     | OJ990505_06.9A11.C18.o2.tm     | Method  | TBLASTX:Maize        |
| Start    | 1                              | End     | 195                  |
| GI       | none                           | Score   | 91                   |
| Exons    | 1..96, 6..86, 54..191, 55..195 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22756  | Seq. ID | OJ990505_06.9A11.C18 |
| Gene No. | 47304  | Strand  | -                    |
| Start    | 1237   | End     | 1548                 |
| Name     | OJ990505_06.9A11.C18.o1.tm                       | Method  | TBLASTX:Maize        |
| Start    | 204  | End     | 424                  |
| GI       | none   | Score   | 66                   |
| Exons    | 204..263, 205..414, 207..422, 235..423, 353..424 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22756                      | Seq. ID | OJ990505_06.9A11.C18 |
| Gene No. | 47304                      | Strand  | -                    |
| Start    | 1237                       | End     | 1548                 |
| Name     | OJ990505_06.9A11.C18.o2.gs | Method  | GENSCAN              |
| Start    | 1237                       | End     | 1548                 |
| GI       | none                       | Score   | .46                  |



Exons 1237..1548

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22757  | Seq. ID | OJ990505_06.9A11.C19 |
| Gene No.    | 47305  | Strand  | +                    |
| Start       | 1  | End     | 848                  |
| Name        | OJ990505_06.9A11.C19.o1.np                                     | Method  | AAT/NAP              |
| Start       | 1  | End     | 644                  |
| GI          | 5103727  | Score   | 426                  |
| Exons       | 1..269, 384..644   |         |                      |
| GI Descrip. | (AB028884) knotted1-type homeobox protein OSH43 [Oryza sativa] |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22757   | Seq. ID | OJ990505_06.9A11.C19 |
| Gene No.    | 47305   | Strand  | +                    |
| Start       | 1   | End     | 848                  |
| Name        | OJ990505_06.9A11.C19.o1.gp  | Method  | AAT/GAP              |
| Start       | 225   | End     | 846                  |
| GI          | 137_1.R1084   | Score   | 756                  |
| Exons       | 225..269, 384..846  |         |                      |
| GI Descrip. | '2832408/emb CAA74605  4.0e-33 (Y14209) R2R3-MYB transcription factor [Arabidopsis thaliana]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22757   | Seq. ID | OJ990505_06.9A11.C19 |
| Gene No.    | 47305   | Strand  | +                    |
| Start       | 1   | End     | 848                  |
| Name        | OJ990505_06.9A11.C19.o2.gp  | Method  | AAT/GAP              |
| Start       | 225   | End     | 848                  |
| GI          | 137_1.R1084   | Score   | 754                  |
| Exons       | 225..269, 384..848  |         |                      |
| GI Descrip. | '2832408/emb CAA74605  4.0e-33 (Y14209) R2R3-MYB transcription factor [Arabidopsis thaliana]' |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22757                      | Seq. ID | OJ990505_06.9A11.C19 |
| Gene No. | 47305                      | Strand  | +                    |
| Start    | 1                          | End     | 848                  |
| Name     | OJ990505_06.9A11.C19.o1.gs | Method  | GENSCAN              |
| Start    | 396                        | End     | 647                  |
| GI       | none                       | Score   | .52                  |
| Exons    | 396..647                   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22757  | Seq. ID | OJ990505_06.9A11.C19 |
| Gene No. | 47306  | Strand  | -                    |
| Start    | 1129   | End     | 4373                 |
| Name     | OJ990505_06.9A11.C19.o1.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 225  | End     | 650                  |
| GI       | none   | Score   | 64                   |
| Exons    | 225..269, 381..482, 386..478, 437..487, 606..638, 609..650 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22757                              | Seq. ID | OJ990505_06.9A11.C19 |
| Gene No. | 47306                              | Strand  | -                    |
| Start    | 1129                               | End     | 4373                 |
| Name     | OJ990505_06.9A11.C19.o2.gs         | Method  | GENSCAN              |
| Start    | 1129                               | End     | 4373                 |
| GI       | none                               | Score   | .41                  |
| Exons    | 1129..1272, 3859..4009, 4314..4373 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22758 | Seq. ID | OJ990505_06.9A11.C20 |
| Gene No. | 47307 | Strand  | +                    |

Start 1120  
 Name OJ990505\_06.9A11.C20.o1.gp  
 Start 1120  
 GI none  
 Exons 1120..1411

End 1411  
 Method AAT/GAP  
 End 1411  
 Score 584

Seq. No. 22758  
 Gene No. 47308  
 Start 45  
 Name OJ990505\_06.9A11.C20.o1.gs  
 Start 45  
 GI none  
 Exons 45..161, 510..637, 1807..1846, 2775..2846, 3094..3319, 3346..3503

Seq. ID OJ990505\_06.9A11.C20  
 Strand -  
 End 3503  
 Method GENSCAN  
 End 3503  
 Score .51

Seq. No. 22758  
 Gene No. 47308  
 Start 45  
 Name OJ990505\_06.9A11.C20.o2.gp  
 Start 2093  
 GI none  
 Exons 2093..3160

Seq. ID OJ990505\_06.9A11.C20  
 Strand -  
 End 3503  
 Method AAT/GAP  
 End 3160  
 Score 2097

Seq. No. 22758  
 Gene No. 47308  
 Start 45  
 Name OJ990505\_06.9A11.C20.o3.gp  
 Start 3039  
 GI none  
 Exons 3039..3395

Seq. ID OJ990505\_06.9A11.C20  
 Strand -  
 End 3503  
 Method AAT/GAP  
 End 3395  
 Score 575

Seq. No. 22759  
 Gene No. 47309  
 Start 6998  
 Name OJ990505\_06.9A11.C21.o1.np  
 Start 6998  
 GI 3236253  
 Exons 6998..9012  
 GI Descrip. (AC004684) putative receptor-like protein kinase [Arabidopsis thaliana]

Seq. ID OJ990505\_06.9A11.C21  
 Strand +  
 End 9012  
 Method AAT/NAP  
 End 9012  
 Score 1772

Seq. No. 22759  
 Gene No. 47310  
 Start 16233  
 Name OJ990505\_06.9A11.C21.o2.gp  
 Start 16169  
 GI 2508\_1.R1084  
 Exons 16169..16344, 16457..16563, 16646..16688, 17749..18066  
 GI Descrip. '3402817/emb|CAA07704| 2.0e-35 (AJ007829) lacZ'' [Cloning vector pGreen]'

Seq. ID OJ990505\_06.9A11.C21  
 Strand +  
 End 18066  
 Method AAT/GAP  
 End 18066  
 Score 1183

Seq. No. 22759  
 Gene No. 47310  
 Start 16233  
 Name OJ990505\_06.9A11.C21.o3.gs  
 Start 16233  
 GI none

Seq. ID OJ990505\_06.9A11.C21  
 Strand +  
 End 18066  
 Method GENSCAN  
 End 17783  
 Score .98

Exons 16233..16344, 16457..16563, 16646..16688, 17749..17783

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22759                      | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47310                      | Strand  | +                    |
| Start    | 16233                      | End     | 18066                |
| Name     | OJ990505_06.9A11.C21.o3.np | Method  | AAT/NAP              |
| Start    | 16233                      | End     | 17789                |
| GI       | 4490728                    | Score   | 227                  |

Exons 16233..16344, 16457..16563, 16646..16688, 17749..17789

GI Descrip. (AL035709) putative protein [Arabidopsis thaliana]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22759                      | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47311                      | Strand  | -                    |
| Start    | 2857                       | End     | 3244                 |
| Name     | OJ990505_06.9A11.C21.o1.gp | Method  | AAT/GAP              |
| Start    | 2857                       | End     | 3244                 |
| GI       | LIB3477-003-P1-K1-E9       | Score   | 94                   |

Exons 2857..2922, 3222..3244

GI Descrip. '2498586/sp|Q40638|MPO1\_ORYSA 2.0e-24 MAJOR POLLEN ALLERGEN ORY S 1 PRECURSOR (ORY S I) >gi\_1173557 (U31771) Ory s 1 [Oryza sativa]'

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22759                      | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47312                      | Strand  | -                    |
| Start    | 11113                      | End     | 13781                |
| Name     | OJ990505_06.9A11.C21.o2.np | Method  | AAT/NAP              |
| Start    | 11113                      | End     | 13781                |
| GI       | 3236253                    | Score   | 1468                 |

Exons 11113..11206, 11822..13781

GI Descrip. (AC004684) putative receptor-like protein kinase [Arabidopsis thaliana]

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22759                      | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47312                      | Strand  | -                    |
| Start    | 11113                      | End     | 13781                |
| Name     | OJ990505_06.9A11.C21.o2.gs | Method  | GENSCAN              |
| Start    | 11741                      | End     | 13775                |
| GI       | none                       | Score   | .87                  |

Exons 11741..12282, 12454..13189, 13287..13775

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22759                      | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313                      | Strand  | -                    |
| Start    | 18430                      | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o4.tm | Method  | TBLASTX:Maize        |
| Start    | 7022                       | End     | 13691                |
| GI       | none                       | Score   | 169                  |

Exons 7022..7159, 7067..7216, 7237..7323, 7238..7333, 7333..7446, 7334..7444, 13345..13530, 13377..13511, 13599..13691

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22759                      | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313                      | Strand  | -                    |
| Start    | 18430                      | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o2.ts | Method  | TBLASTX:Soybean      |
| Start    | 7082                       | End     | 13712                |
| GI       | none                       | Score   | 85                   |

Exons 7082..7213, 7243..7527, 7247..7528, 7523..7627, 13142..13186, 13239..13370, 13240..13359, 13572..13595, 13599..13712

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22759  | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313  | Strand  | -                    |
| Start    | 18430  | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 7106   | End     | 13670                |
| GI       | none   | Score   | 78                   |
| Exons    | 7106..7213, 7241..7333, 7352..7537, 7526..7885, 7555..7779, 7936..8271, 7936..8277, 7949..8302, 8300..8554, 8318..8611, 8419..8601, 8536..8679, 8647..8895, 8772..8882, 11918..12088, 11921..12094, 12116..12667, 12123..12821, 12716..12853, 12938..13087, 12939..13085, 13100..13195, 13104..13211, 13212..13388, 13213..13362, 13377..13511, 13381..13413, 13569..13595, 13596..13670 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22759  | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313  | Strand  | -                    |
| Start    | 18430  | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 7447   | End     | 13322                |
| GI       | none   | Score   | 430                  |
| Exons    | 7447..7779, 7448..7855, 7758..7808, 7763..7831, 7843..7878, 12938..13087, 12939..13088, 13100..13195, 13100..13195, 13242..13322 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22759  | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313  | Strand  | -                    |
| Start    | 18430  | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 7447   | End     | 13323                |
| GI       | none   | Score   | 263                  |
| Exons    | 7447..7689, 7448..7690, 13100..13195, 13101..13205, 13233..13322, 13234..13323 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22759  | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313  | Strand  | -                    |
| Start    | 18430  | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o2.tw   | Method  | TBLASTX:Wheat        |
| Start    | 7690   | End     | 13082                |
| GI       | none   | Score   | 269                  |
| Exons    | 7690..7779, 7697..7975, 7755..7913, 7840..7974, 7960..8013, 7962..8018, 7979..8020, 12740..12781, 12912..13082, 12938..13078 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22759  | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313  | Strand  | -                    |
| Start    | 18430  | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o1.ts   | Method  | TBLASTX:Soybean      |
| Start    | 8021   | End     | 12739                |
| GI       | none   | Score   | 368                  |
| Exons    | 8021..8302, 8023..8277, 8303..8533, 8372..8527, 8422..8532, 12230..12667, 12231..12737, 12325..12678, 12716..12739 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22759                      | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313                      | Strand  | -                    |
| Start    | 18430                      | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 8045                       | End     | 12713                |

|       |  |       |     |
|-------|--|-------|-----|
| GI    | none   | Score | 238 |
| Exons | 8045..8317, 8047..8277, 8141..8329, 8321..8476, 12287..12661, 12288..12713 |       |     |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22759  | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313  | Strand  | -                    |
| Start    | 18430  | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 8073   | End     | 12683                |
| GI       | none   | Score   | 149                  |
| Exons    | 8073..8294, 8074..8277, 8075..8320, 8078..8314, 8291..8611, 8297..8596, 8311..8598, 8536..8649, 8577..8648, 12116..12442, 12120..12452, 12455..12667, 12459..12683 |         |                      |

|          |                                      |         |                      |
|----------|--------------------------------------|---------|----------------------|
| Seq. No. | 22759                                | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313                                | Strand  | -                    |
| Start    | 18430                                | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o5.tw           | Method  | TBLASTX:Wheat        |
| Start    | 8483                                 | End     | 12280                |
| GI       | none                                 | Score   | 81                   |
| Exons    | 8483..8596, 8665..8853, 11927..12280 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22759  | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313  | Strand  | -                    |
| Start    | 18430  | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o3.ts                         | Method  | TBLASTX:Soybean      |
| Start    | 8548   | End     | 12214                |
| GI       | none   | Score   | 234                  |
| Exons    | 8548..8865, 8601..8864, 11924..12094, 12104..12214 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22759  | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313  | Strand  | -                    |
| Start    | 18430  | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o3.tm                                     | Method  | TBLASTX:Maize        |
| Start    | 8650   | End     | 12091                |
| GI       | none   | Score   | 418                  |
| Exons    | 8650..9006, 8652..8954, 8949..9014, 11900..12091, 11921..12091 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22759  | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313  | Strand  | -                    |
| Start    | 18430  | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o4.tw   | Method  | TBLASTX:Wheat        |
| Start    | 16194  | End     | 16690                |
| GI       | none   | Score   | 38                   |
| Exons    | 16194..16220, 16231..16317, 16232..16318, 16389..16460, 16451..16474, 16453..16563, 16456..16518, 16458..16562, 16505..16564, 16644..16688, 16646..16690, 16651..16689 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22759   | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313   | Strand  | -                    |
| Start    | 18430   | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o5.tm  | Method  | TBLASTX:Maize        |
| Start    | 16231   | End     | 17946                |
| GI       | none  | Score   | 80                   |
| Exons    | 16231..16281, 16232..16300, 16453..16563, 16456..16518, 16458..16562, 16628..16687, 16644..16688, 16644..16688, 16645..16689, 16646..16690, 17729..17779, 17739..17780, |         |                      |

17821..17880, 17859..17939, 17883..17945, 17887..17946

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22759                      | Seq. ID | OJ990505_06.9A11.C21 |
| Gene No. | 47313                      | Strand  | -                    |
| Start    | 18430                      | End     | 19152                |
| Name     | OJ990505_06.9A11.C21.o4.gs | Method  | GENSCAN              |
| Start    | 18430                      | End     | 19152                |
| GI       | none                       | Score   | 1                    |
| Exons    | 18430..19152               |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22760                      | Seq. ID | OJ990505_06.9A11.C22 |
| Gene No. | 47314                      | Strand  | -                    |
| Start    | 433                        | End     | 1650                 |
| Name     | OJ990505_06.9A11.C22.o1.gs | Method  | GENSCAN              |
| Start    | 433                        | End     | 1650                 |
| GI       | none                       | Score   | .57                  |
| Exons    | 433..474, 1576..1650       |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22761                      | Seq. ID | OJ990505_06.9A11.C23 |
| Gene No. | 47315                      | Strand  | +                    |
| Start    | 1835                       | End     | 2116                 |
| Name     | OJ990505_06.9A11.C23.o1.gs | Method  | GENSCAN              |
| Start    | 1835                       | End     | 2116                 |
| GI       | none                       | Score   | .87                  |
| Exons    | 1835..1969, 1994..2116     |         |                      |

|          |                                 |         |                      |
|----------|---------------------------------|---------|----------------------|
| Seq. No. | 22762                           | Seq. ID | OJ990505_06.9A11.C24 |
| Gene No. | 47316                           | Strand  | +                    |
| Start    | 65                              | End     | 1405                 |
| Name     | OJ990505_06.9A11.C24.o1.gs      | Method  | GENSCAN              |
| Start    | 65                              | End     | 1405                 |
| GI       | none                            | Score   | .82                  |
| Exons    | 65..317, 1044..1182, 1300..1405 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22762  | Seq. ID | OJ990505_06.9A11.C24 |
| Gene No.    | 47317  | Strand  | +                    |
| Start       | 1612   | End     | 1924                 |
| Name        | OJ990505_06.9A11.C24.o1.np                             | Method  | AAT/NAP              |
| Start       | 1612   | End     | 1924                 |
| GI          | 2197016  | Score   | 164                  |
| Exons       | 1612..1924   |         |                      |
| GI Descrip. | (U96632) D1 protein, photosystem II [Ludisia discolor] |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22762  | Seq. ID | OJ990505_06.9A11.C24 |
| Gene No. | 47318  | Strand  | -                    |
| Start    | 2490   | End     | 2899                 |
| Name     | OJ990505_06.9A11.C24.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1652   | End     | 1917                 |
| GI       | none   | Score   | 56                   |
| Exons    | 1652..1708, 1653..1709, 1713..1808, 1718..1810, 1750..1824, 1802..1888, 1804..1890, 1891..1917 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22762                      | Seq. ID | OJ990505_06.9A11.C24 |
| Gene No. | 47318                      | Strand  | -                    |
| Start    | 2490                       | End     | 2899                 |
| Name     | OJ990505_06.9A11.C24.o2.gs | Method  | GENSCAN              |
| Start    | 2490                       | End     | 2899                 |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| GI          | none   | Score   | .96                  |
| Exons       | 2490..2669, 2762..2899   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22763  | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No.    | 47319  | Strand  | -                    |
| Start       | 1  | End     | 12485                |
| Name        | OJ990505_06.9A11.C25.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 3762                 |
| GI          | 4883612  | Score   | 543                  |
| Exons       | 1..64, 321..421, 482..648, 847..1123, 1218..1302, 1839..1948, 3421..3468, 3568..3762   |         |                      |
| GI Descrip. | (AC006922) hypothetical protein [Arabidopsis thaliana]   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22763  | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No.    | 47319  | Strand  | -                    |
| Start       | 1  | End     | 12485                |
| Name        | OJ990505_06.9A11.C25.o1.gs   | Method  | GENSCAN              |
| Start       | 321  | End     | 11364                |
| GI          | none   | Score   | .85                  |
| Exons       | 321..424, 508..666, 847..1031, 1839..1948, 3421..3497, 3568..3708, 3875..3989, 6042..6141, 6401..6495, 7349..7893, 8032..8054, 9809..11364   |         |                      |
|             |  |         |                      |
| Seq. No.    | 22763  | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No.    | 47319  | Strand  | -                    |
| Start       | 1  | End     | 12485                |
| Name        | OJ990505_06.9A11.C25.o1.tm   | Method  | TBLASTX:Maize        |
| Start       | 586  | End     | 1907                 |
| GI          | none   | Score   | 100                  |
| Exons       | 586..669, 586..642, 587..667, 811..915, 844..912, 845..916, 846..914, 912..1076, 914..1123, 923..1123, 1018..1140, 1218..1301, 1219..1302, 1836..1907, 1836..1898, 1838..1906  |         |                      |
|             |  |         |                      |
| Seq. No.    | 22763  | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No.    | 47319  | Strand  | -                    |
| Start       | 1  | End     | 12485                |
| Name        | OJ990505_06.9A11.C25.o1.gp   | Method  | AAT/GAP              |
| Start       | 4820   | End     | 6494                 |
| GI          | 2442935  | Score   | 616                  |
| Exons       | 4820..5003, 6042..6141, 6401..6494   |         |                      |
| GI Descrip. | 730461/sp P41057 R29A_YEAST 3.0e-17 40S RIBOSOMAL PROTEIN YS29A<br>>gi_626904_pir_S48503 ribosomal protein S29.e.A, cytosolic - yeast (Saccharomyces cerevisiae) >gi_287628_dbj_BAA03507 (D14676) ribosomal protein YS29 [Saccharomyces cerevisiae]<br>>gi_625108 (U19729) Ylr388wp [Saccharomyces cerevisiae] |         |                      |
|             |  |         |                      |
| Seq. No.    | 22763  | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No.    | 47319  | Strand  | -                    |
| Start       | 1  | End     | 12485                |
| Name        | OJ990505_06.9A11.C25.o2.np   | Method  | AAT/NAP              |
| Start       | 5207   | End     | 6483                 |
| GI          | 1750404  | Score   | 162                  |
| Exons       | 5207..5271, 6026..6141, 6401..6483   |         |                      |
| GI Descrip. | (U80953) Similar to 40S ribosomal protein S29; coded for by C. elegans cDNA cm10c2; coded for by C. elegans cDNA yk61d8.5; coded for by C. elegans cDNA yk107e8.5; coded for by C. elegans cDNA CEESF55F; coded for by C. elegans cDNA yk107e8.3;...   |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22763  | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No. | 47319  | Strand  | -                    |
| Start    | 1  | End     | 12485                |
| Name     | OJ990505_06.9A11.C25.o1.tw                                 | Method  | TBLASTX:Wheat        |
| Start    | 6032   | End     | 6477                 |
| GI       | none   | Score   | 171                  |
| Exons    | 6032..6142, 6039..6140, 6043..6141, 6401..6475, 6403..6477 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22763  | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No. | 47319  | Strand  | -                    |
| Start    | 1  | End     | 12485                |
| Name     | OJ990505_06.9A11.C25.o2.ts   | Method  | TBLASTX:Soybean      |
| Start    | 6042   | End     | 6465                 |
| GI       | none   | Score   | 115                  |
| Exons    | 6042..6128, 6042..6140, 6043..6141, 6046..6141, 6401..6463, 6406..6465 |         |                      |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22763                              | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No. | 47319                              | Strand  | -                    |
| Start    | 1                                  | End     | 12485                |
| Name     | OJ990505_06.9A11.C25.o4.tm         | Method  | TBLASTX:Maize        |
| Start    | 6042                               | End     | 6171                 |
| GI       | none                               | Score   | 135                  |
| Exons    | 6042..6128, 6042..6146, 6043..6171 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22763   | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No.    | 47319   | Strand  | -                    |
| Start       | 1   | End     | 12485                |
| Name        | OJ990505_06.9A11.C25.o3.np  | Method  | AAT/NAP              |
| Start       | 6172  | End     | 12485                |
| GI          | 4544402   | Score   | 873                  |
| Exons       | 6172..6245, 7328..7887, 8603..8793, 9809..10315, 10358..11101, 12391..12485 |         |                      |
| GI Descrip. | (AC007047) putative LRR receptor protein kinase [Arabidopsis thaliana]      |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22763   | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No. | 47319   | Strand  | -                    |
| Start    | 1   | End     | 12485                |
| Name     | OJ990505_06.9A11.C25.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 7481  | End     | 10230                |
| GI       | none  | Score   | 160                  |
| Exons    | 7481..7882, 7566..7862, 8715..8795, 8715..8795, 8725..8796, 8729..8809, 8729..8803, 9808..9834, 9823..9909, 9836..9904, 9934..10008, 9935..10009, 9988..10065, 10090..10230, 10121..10216 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22763  | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No. | 47319  | Strand  | -                    |
| Start    | 1  | End     | 12485                |
| Name     | OJ990505_06.9A11.C25.o3.tm   | Method  | TBLASTX:Maize        |
| Start    | 7781   | End     | 9991                 |
| GI       | none   | Score   | 151                  |
| Exons    | 7781..7903, 7782..7895, 7783..7899, 8639..8800, 8663..8794, 8664..8795, 8665..8796, 9804..9986, 9808..9990, 9809..9991, 9815..9991 |         |                      |



|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22763  | Seq. ID | OJ990505_06.9A11.C25 |
| Gene No. | 47319  | Strand  | -                    |
| Start    | 1  | End     | 12485                |
| Name     | OJ990505_06.9A11.C25.o2.tm   | Method  | TBLASTX:Maize        |
| Start    | 10051  | End     | 10498                |
| GI       | none   | Score   | 148                  |
| Exons    | 10051..10287, 10075..10242, 10118..10288, 10264..10398, 10278..10484, 10280..10498, 10428..10484 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22764  | Seq. ID | OJ990505_06.9A11.C26 |
| Gene No. | 47320  | Strand  | +                    |
| Start    | 2791   | End     | 7759                 |
| Name     | OJ990505_06.9A11.C26.o2.gs   | Method  | GENSCAN              |
| Start    | 2791   | End     | 7759                 |
| GI       | none   | Score   | .53                  |
| Exons    | 2791..2815, 2873..2995, 3837..3914, 4608..4630, 6016..6208, 7437..7516, 7741..7759 |         |                      |

|          |                                |         |                      |
|----------|--------------------------------|---------|----------------------|
| Seq. No. | 22764                          | Seq. ID | OJ990505_06.9A11.C26 |
| Gene No. | 47321                          | Strand  | -                    |
| Start    | 632                            | End     | 1263                 |
| Name     | OJ990505_06.9A11.C26.o1.gs     | Method  | GENSCAN              |
| Start    | 632                            | End     | 1263                 |
| GI       | none                           | Score   | .66                  |
| Exons    | 632..747, 813..937, 1091..1263 |         |                      |

|          |                               |         |                      |
|----------|-------------------------------|---------|----------------------|
| Seq. No. | 22765                         | Seq. ID | OJ990505_06.9A11.C27 |
| Gene No. | 47322                         | Strand  | +                    |
| Start    | 100                           | End     | 1180                 |
| Name     | OJ990505_06.9A11.C27.o1.gs    | Method  | GENSCAN              |
| Start    | 100                           | End     | 1180                 |
| GI       | none                          | Score   | .66                  |
| Exons    | 100..473, 775..859, 983..1180 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22765                      | Seq. ID | OJ990505_06.9A11.C27 |
| Gene No. | 47323                      | Strand  | -                    |
| Start    | 1598                       | End     | 1981                 |
| Name     | OJ990505_06.9A11.C27.o2.gs | Method  | GENSCAN              |
| Start    | 1598                       | End     | 1981                 |
| GI       | none                       | Score   | .97                  |
| Exons    | 1598..1981                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22765                      | Seq. ID | OJ990505_06.9A11.C27 |
| Gene No. | 47324                      | Strand  | -                    |
| Start    | 6013                       | End     | 6207                 |
| Name     | OJ990505_06.9A11.C27.o3.gs | Method  | GENSCAN              |
| Start    | 6013                       | End     | 6207                 |
| GI       | none                       | Score   | .53                  |
| Exons    | 6013..6207                 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22766                      | Seq. ID | OJ990505_06.9A11.C28 |
| Gene No. | 47325                      | Strand  | +                    |
| Start    | 43                         | End     | 9163                 |
| Name     | OJ990505_06.9A11.C28.o1.gs | Method  | GENSCAN              |
| Start    | 43                         | End     | 9163                 |
| GI       | none                       | Score   | .75                  |

Exons 43..90, 217..294, 406..522, 1922..2007, 2701..2845, 2952..3047, 3518..3609, 3881..3982, 4076..4222, 4301..4451, 4603..4665, 4755..4991, 5266..5370, 5448..5561, 5644..6222, 6932..7097, 8257..8403, 8928..9163

Seq. No. 22766 Seq. ID OJ990505\_06.9A11.C28  
 Gene No. 47325 Strand +  
 Start 43 End 9163  
 Name OJ990505\_06.9A11.C28.o1.np Method AAT/NAP  
 Start 43 End 8561  
 GI 6561965 Score 1840  
 Exons 43..90, 217..294, 406..522, 1922..2007, 2701..2845, 2952..3047, 3518..3609, 3881..3982, 4076..4222, 4301..4451, 4603..4665, 4755..4991, 5278..5370, 5448..5561, 5644..6081, 8476..8561  
 GI Descrip. (AL132964) kinesin-like protein [Arabidopsis thaliana]

Seq. No. 22766 Seq. ID OJ990505\_06.9A11.C28  
 Gene No. 47326 Strand +  
 Start 14524 End 15109  
 Name OJ990505\_06.9A11.C28.o3.gs Method GENSCAN  
 Start 14524 End 15089  
 GI none Score .78  
 Exons 14524..15089

Seq. No. 22766 Seq. ID OJ990505\_06.9A11.C28  
 Gene No. 47326 Strand +  
 Start 14524 End 15109  
 Name OJ990505\_06.9A11.C28.o2.np Method AAT/NAP  
 Start 14530 End 15109  
 GI 2827715 Score 352  
 Exons 14530..15109  
 GI Descrip. (AL021684) receptor protein kinase - like protein [Arabidopsis thaliana]

Seq. No. 22766 Seq. ID OJ990505\_06.9A11.C28  
 Gene No. 47327 Strand -  
 Start 10433 End 12811  
 Name OJ990505\_06.9A11.C28.o2.tm Method TBLASTX:Maize  
 Start 418 End 3592  
 GI none Score 165  
 Exons 418..522, 418..522, 1920..2006, 1921..2007, 1921..2007, 2675..2860, 2678..2845, 2698..2850, 2949..3056, 2949..3050, 3512..3592, 3518..3592

Seq. No. 22766 Seq. ID OJ990505\_06.9A11.C28  
 Gene No. 47327 Strand -  
 Start 10433 End 12811  
 Name OJ990505\_06.9A11.C28.o1.ts Method TBLASTX:Soybean  
 Start 3933 End 4439  
 GI none Score 46  
 Exons 3933..3980, 4074..4193, 4299..4439

Seq. No. 22766 Seq. ID OJ990505\_06.9A11.C28  
 Gene No. 47327 Strand -  
 Start 10433 End 12811  
 Name OJ990505\_06.9A11.C28.o1.tm Method TBLASTX:Maize  
 Start 4603 End 5342

|       |  |       |    |
|-------|--|-------|----|
| GI    | none   | Score | 95 |
| Exons | 4603..4668, 4603..4668, 4604..4669, 4740..4826, 4753..4824, 4821..4994, 4821..4994, 5241..5342, 5262..5333, 5263..5340 |       |    |

|          |                                    |         |                      |
|----------|------------------------------------|---------|----------------------|
| Seq. No. | 22766                              | Seq. ID | OJ990505_06.9A11.C28 |
| Gene No. | 47327                              | Strand  | -                    |
| Start    | 10433                              | End     | 12811                |
| Name     | OJ990505_06.9A11.C28.o3.tm         | Method  | TBLASTX:Maize        |
| Start    | 5969                               | End     | 6120                 |
| GI       | none                               | Score   | 217                  |
| Exons    | 5969..6112, 5971..6120, 5973..6119 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22766  | Seq. ID | OJ990505_06.9A11.C28 |
| Gene No. | 47327  | Strand  | -                    |
| Start    | 10433  | End     | 12811                |
| Name     | OJ990505_06.9A11.C28.o2.gs                             | Method  | GENSCAN              |
| Start    | 10433  | End     | 12811                |
| GI       | none   | Score   | .43                  |
| Exons    | 10433..10588, 10686..10733, 11640..11745, 12597..12811 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22766  | Seq. ID | OJ990505_06.9A11.C28 |
| Gene No. | 47328  | Strand  |                      |
| Start    | 14727  | End     | 15086                |
| Name     | OJ990505_06.9A11.C28.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 14727  | End     | 15086                |
| GI       | none   | Score   | 173                  |
| Exons    | 14727..14858, 14740..14931, 14749..14865, 14889..14924, 14974..15084, 14980..15081, 14983..15081, 15027..15086 |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22767  | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No.    | 47329  | Strand  | +                    |
| Start       | 1  | End     | 2401                 |
| Name        | OJ990505_06.9A11.C29.o1.np   | Method  | AAT/NAP              |
| Start       | 1  | End     | 2398                 |
| GI          | 2827715  | Score   | 2813                 |
| Exons       | 1..1684, 1917..2270, 2343..2398  |         |                      |
| GI Descrip. | (AL021684) receptor protein kinase - like protein [Arabidopsis thaliana] |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22767                      | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47329                      | Strand  | +                    |
| Start    | 1                          | End     | 2401                 |
| Name     | OJ990505_06.9A11.C29.o1.gs | Method  | GENSCAN              |
| Start    | 49                         | End     | 2401                 |
| GI       | none                       | Score   | .94                  |
| Exons    | 49..1684, 1917..2401       |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22767  | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No.    | 47329  | Strand  | +                    |
| Start       | 1  | End     | 2401                 |
| Name        | OJ990505_06.9A11.C29.o1.gp   | Method  | AAT/GAP              |
| Start       | 53   | End     | 422                  |
| GI          | 27924_1.R1084  | Score   | 720                  |
| Exons       | 53..422  |         |                      |
| GI Descrip. | '2827715/emb CAA16688  2.0e-43 (AL021684) receptor protein kinase - like protein [Arabidopsis thaliana]' |         |                      |

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22767  | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No.    | 47329  | Strand  | +                    |
| Start       | 1  | End     | 2401                 |
| Name        | OJ990505_06.9A11.C29.o2.gp   | Method  | AAT/GAP              |
| Start       | 697  | End     | 1240                 |
| GI          | uC-osflm202068e05b1  | Score   | 1053                 |
| Exons       | 697..1240  |         |                      |
| GI Descrip. | '2827715/emb CAA16688  5.0e-64 (AL021684) receptor protein kinase - like protein [Arabidopsis thaliana]' |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22767   | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No.    | 47330   | Strand  | +                    |
| Start       | 2420  | End     | 2874                 |
| Name        | OJ990505_06.9A11.C29.o3.gp  | Method  | AAT/GAP              |
| Start       | 2420  | End     | 2874                 |
| GI          | uC-osflcyp030f12b1  | Score   | 902                  |
| Exons       | 2420..2874  |         |                      |
| GI Descrip. | '3540181 4.0e-12 (AC004122) Unknown protein [Arabidopsis thaliana]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22767  | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331  | Strand  | -                    |
| Start    | 3961   | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o3.ts   | Method  | TBLASTX:Soybean      |
| Start    | 10   | End     | 684                  |
| GI       | none   | Score   | 559                  |
| Exons    | 10..120, 55..684, 55..360, 91..426, 186..425, 265..426, 439..654, 448..684, 451..684, 454..645, 478..684, 540..662, 549..683, 568..681 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22767  | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331  | Strand  | -                    |
| Start    | 3961   | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o1.tc   | Method  | TBLASTX:Cress        |
| Start    | 55   | End     | 2227                 |
| GI       | none   | Score   | 51                   |
| Exons    | 55..138, 55..438, 55..426, 55..360, 55..426, 91..438, 115..438, 184..390, 193..333, 195..425, 211..426, 409..672, 448..801, 451..732, 451..573, 451..867, 454..942, 463..861, 468..581, 550..744, 550..861, 670..861, 687..860, 739..861, 777..905, 1012..1281, 1083..1274, 1284..1709, 1285..1683, 1379..1693, 1883..2050, 1889..2029, 1912..2070, 2050..2223, 2078..2227 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22767   | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331   | Strand  | -                    |
| Start    | 3961  | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o2.tm                        | Method  | TBLASTX:Maize        |
| Start    | 55  | End     | 1062                 |
| GI       | none  | Score   | 124                  |
| Exons    | 55..354, 454..717, 460..789, 520..1062, 520..1053 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22767                      | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331                      | Strand  | -                    |
| Start    | 3961                       | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o5.tw | Method  | TBLASTX:Wheat        |
| Start    | 271                        | End     | 861                  |
| GI       | none                       | Score   | 79                   |

Exons 271..417, 520..846, 595..861

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22767   | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331   | Strand  | -                    |
| Start    | 3961  | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o1.ts  | Method  | TBLASTX:Soybean      |
| Start    | 685   | End     | 2317                 |
| GI       | none  | Score   | 373                  |
| Exons    | 685..957, 687..956, 805..978, 991..1683, 1005..1682, 1582..1683, 1886..2317, 1912..2226 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22767  | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331  | Strand  | -                    |
| Start    | 3961   | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 1062   | End     | 1990                 |
| GI       | none   | Score   | 964                  |
| Exons    | 1062..1682, 1063..1683, 1065..1706, 1181..1729, 1886..1990, 1891..1989 |         |                      |

|          |                            |         |                      |
|----------|----------------------------|---------|----------------------|
| Seq. No. | 22767                      | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331                      | Strand  | -                    |
| Start    | 3961                       | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o1.tw | Method  | TBLASTX:Wheat        |
| Start    | 1264                       | End     | 1587                 |
| GI       | none                       | Score   | 337                  |
| Exons    | 1264..1587, 1266..1586     |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22767  | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331  | Strand  | -                    |
| Start    | 3961   | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o4.tm                                 | Method  | TBLASTX:Maize        |
| Start    | 2011   | End     | 2533                 |
| GI       | none   | Score   | 328                  |
| Exons    | 2011..2277, 2012..2227, 2237..2407, 2242..2406, 2504..2533 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22767  | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331  | Strand  | -                    |
| Start    | 3961   | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o3.tw   | Method  | TBLASTX:Wheat        |
| Start    | 2111   | End     | 2412                 |
| GI       | none   | Score   | 181                  |
| Exons    | 2111..2242, 2120..2242, 2122..2253, 2246..2410, 2314..2355, 2341..2412, 2344..2397 |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22767  | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331  | Strand  | -                    |
| Start    | 3961   | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o2.gs   | Method  | GENSCAN              |
| Start    | 3961   | End     | 9778                 |
| GI       | none   | Score   | .83                  |
| Exons    | 3961..3970, 5201..5290, 6585..6653, 6762..6856, 6940..7029, 7780..7863, 7964..8053, 8167..8481, 9416..9625, 9707..9778 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22767 | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331 | Strand  | -                    |
| Start    | 3961  | End     | 9946                 |

Name OJ990505\_06.9A11.C29.o3.np Method AAT/NAP  
 Start 5219 End 9946  
 GI 3063699 Score 96  
 Exons 5219..5293, 9723..9946  
 GI Descrip. (AL022537) putative protein [Arabidopsis thaliana]

Seq. No. 22767 Seq. ID OJ990505\_06.9A11.C29  
 Gene No. 47331 Strand -  
 Start 3961 End 9946  
 Name OJ990505\_06.9A11.C29.o4.gp Method AAT/GAP  
 Start 6386 End 9850  
 GI 1278\_1.R1084 Score 2433  
 Exons 6386..6653, 6762..6856, 6940..7029, 7105..7140, 7780..7863,  
 7964..8053, 8167..8481, 9416..9625, 9707..9850  
 GI Descrip. '3183079/sp|Q42972|MDHG\_ORYSA 1.0e-167 MALATE DEHYDROGENASE,  
 GLYOXYSOMAL PRECURSOR >gi\_1375075\_dbj\_BAA12870.1\_ (D85763)  
 glyoxysomal malate dehydrogenase [Oryza sativa]'

Seq. No. 22767 Seq. ID OJ990505\_06.9A11.C29  
 Gene No. 47331 Strand -  
 Start 3961 End 9946  
 Name OJ990505\_06.9A11.C29.o2.tc Method TBLASTX:Cress  
 Start 6531 End 9763  
 GI none Score 80  
 Exons 6531..6659, 6581..6661, 6761..6874, 6762..6857, 6937..7035,  
 6938..7030, 7081..7149, 7106..7153, 7774..7878, 7781..7879,  
 7961..8053, 7962..8054, 8155..8481, 8156..8482, 9413..9598,  
 9414..9596, 9722..9763

Seq. No. 22767 Seq. ID OJ990505\_06.9A11.C29  
 Gene No. 47331 Strand -  
 Start 3961 End 9946  
 Name OJ990505\_06.9A11.C29.o3.tm Method TBLASTX:Maize  
 Start 6567 End 9613  
 GI none Score 35  
 Exons 6567..6593, 6588..6659, 6591..6659, 6761..6856, 6762..6860,  
 6937..7035, 6938..7024, 6938..7039, 7081..7149, 7106..7153,  
 7690..7866, 7774..7878, 7781..7879, 7961..8050, 7962..8051,  
 8156..8506, 8167..8481, 9413..9613, 9414..9593

Seq. No. 22767 Seq. ID OJ990505\_06.9A11.C29  
 Gene No. 47331 Strand -  
 Start 3961 End 9946  
 Name OJ990505\_06.9A11.C29.o2.ts Method TBLASTX:Soybean  
 Start 6575 End 9626  
 GI none Score 97  
 Exons 6575..6661, 6761..6856, 6762..6857, 6937..7035, 6938..7036,  
 7105..7149, 7106..7153, 7774..7878, 7781..7858, 7961..8053,  
 7968..8054, 8155..8481, 8156..8482, 9413..9604, 9414..9626

Seq. No. 22767 Seq. ID OJ990505\_06.9A11.C29  
 Gene No. 47331 Strand -  
 Start 3961 End 9946  
 Name OJ990505\_06.9A11.C29.o2.np Method AAT/NAP  
 Start 6584 End 9781  
 GI 3183079 Score 1228  
 Exons 6584..6653, 6762..6856, 6940..7029, 7105..7140, 7780..7863,

7964..8053, 8167..8481, 9416..9638, 9723..9781  
 GI Descrip. MALATE DEHYDROGENASE, GLYOXYSOMAL PRECURSOR  
 gi|1375075|dbj|BAA12870.1| (D85763) glyoxysomal malate  
 dehydrogenase [Oryza sativa]

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22767   | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331   | Strand  | -                    |
| Start    | 3961  | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o4.tw  | Method  | TBLASTX:Wheat        |
| Start    | 6587  | End     | 7140                 |
| GI       | none  | Score   | 55                   |
| Exons    | 6587..6658, 6761..6856, 6783..6857, 6937..7035, 6938..7036,<br>7105..7140, 7106..7138 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22767   | Seq. ID | OJ990505_06.9A11.C29 |
| Gene No. | 47331   | Strand  | -                    |
| Start    | 3961  | End     | 9946                 |
| Name     | OJ990505_06.9A11.C29.o2.tw  | Method  | TBLASTX:Wheat        |
| Start    | 8337  | End     | 9614                 |
| GI       | none  | Score   | 201                  |
| Exons    | 8337..8471, 8338..8481, 8342..8482, 9406..9441, 9413..9613,<br>9414..9614 |         |                      |

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22768   | Seq. ID | OJ990505_06.9A11.C30 |
| Gene No.    | 47332   | Strand  | -                    |
| Start       | 1028  | End     | 1676                 |
| Name        | OJ990505_06.9A11.C30.o1.gp  | Method  | AAT/GAP              |
| Start       | 734   | End     | 1251                 |
| GI          | 37356_1.R1084   | Score   | 785                  |
| Exons       | 734..1123, 1205..1251   |         |                      |
| GI Descrip. | '3929358/sp O24143 NUIM TOBAC 1.0e-13 NADH-UBIQUINONE<br>OXIDOREDUCTASE 23 KD SUBUNIT PRECURSOR (COMPLEX I-23KD)<br>(CI-23KD) >gi_1666177_emb_CAA70326_ (Y09109) NADH dehydrogenase<br>[Nicotiana tabacum]' |         |                      |

|          |  |         |                      |
|----------|--|---------|----------------------|
| Seq. No. | 22768  | Seq. ID | OJ990505_06.9A11.C30 |
| Gene No. | 47332  | Strand  | -                    |
| Start    | 1028   | End     | 1676                 |
| Name     | OJ990505_06.9A11.C30.o1.tm   | Method  | TBLASTX:Maize        |
| Start    | 897  | End     | 1495                 |
| GI       | none   | Score   | 71                   |
| Exons    | 897..935, 913..936, 932..997, 934..996, 939..998, 945..998,<br>1019..1126, 1024..1137, 1203..1319, 1205..1318, 1247..1318,<br>1423..1488, 1429..1488, 1442..1495 |         |                      |

|          |   |         |                      |
|----------|---|---------|----------------------|
| Seq. No. | 22768   | Seq. ID | OJ990505_06.9A11.C30 |
| Gene No. | 47332   | Strand  | -                    |
| Start    | 1028  | End     | 1676                 |
| Name     | OJ990505_06.9A11.C30.o1.tc  | Method  | TBLASTX:Cress        |
| Start    | 1019  | End     | 1495                 |
| GI       | none  | Score   | 65                   |
| Exons    | 1019..1126, 1030..1143, 1203..1319, 1205..1318, 1247..1318,<br>1418..1489, 1442..1495 |         |                      |

|          |       |         |                      |
|----------|-------|---------|----------------------|
| Seq. No. | 22768 | Seq. ID | OJ990505_06.9A11.C30 |
| Gene No. | 47332 | Strand  | -                    |
| Start    | 1028  | End     | 1676                 |

|       |                                    |        |         |
|-------|------------------------------------|--------|---------|
| Name  | OJ990505_06.9A11.C30.ol.gs         | Method | GENSCAN |
| Start | 1028                               | End    | 1489    |
| GI    | none                               | Score  | .94     |
| Exons | 1028..1123, 1205..1316, 1422..1489 |        |         |

  

|             |   |         |                      |
|-------------|---|---------|----------------------|
| Seq. No.    | 22768   | Seq. ID | OJ990505_06.9A11.C30 |
| Gene No.    | 47332   | Strand  | -                    |
| Start       | 1028  | End     | 1676                 |
| Name        | OJ990505_06.9A11.C30.ol.np  | Method  | AAT/NAP              |
| Start       | 1031  | End     | 1676                 |
| GI          | 6226880   | Score   | 393                  |
| Exons       | 1031..1123, 1205..1316, 1422..1489, 1645..1676  |         |                      |
| GI Descrip. | NADH-UBIQUINONE OXIDOREDUCTASE 23 KD SUBUNIT PRECURSOR (COMPLEX I-23KD) (CI-23KD) (COMPLEX I-28.5KD) (CI-28.5KD)<br>gi 1076670 pir  S52386 NADH dehydrogenase (EC 1.6.99.3) - potato<br>gi 668985 emb CAA59062  (X84319) NADH dehydrogenase [Solanum tuberosum] |         |                      |

  

|             |  |         |                      |
|-------------|--|---------|----------------------|
| Seq. No.    | 22768  | Seq. ID | OJ990505_06.9A11.C30 |
| Gene No.    | 47332  | Strand  | -                    |
| Start       | 1028   | End     | 1676                 |
| Name        | OJ990505_06.9A11.C30.o2.gp   | Method  | AAT/GAP              |
| Start       | 1285   | End     | 1489                 |
| GI          | 21272_1.R1084  | Score   | 159                  |
| Exons       | 1285..1316, 1422..1489   |         |                      |
| GI Descrip. | '1076670 pir  S52386 1.0e-50 NADH dehydrogenase (EC 1.6.99.3) - potato >gi_668985_emb_CAA59062_ (X84319) NADH dehydrogenase [Solanum tuberosum]' |         |                      |

  

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22769                     | Seq. ID | OJ990715_06.9A01.C1 |
| Gene No. | 47333                     | Strand  | +                   |
| Start    | 1246                      | End     | 2389                |
| Name     | OJ990715_06.9A01.C1.ol.gs | Method  | GENSCAN             |
| Start    | 1246                      | End     | 2389                |
| GI       | none                      | Score   | .81                 |
| Exons    | 1246..1369, 1551..2389    |         |                     |

  

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22769  | Seq. ID | OJ990715_06.9A01.C1 |
| Gene No.    | 47333  | Strand  | +                   |
| Start       | 1246   | End     | 2389                |
| Name        | OJ990715_06.9A01.C1.ol.gp  | Method  | AAT/GAP             |
| Start       | 1460   | End     | 1957                |
| GI          | 111_9.R1084  | Score   | 942                 |
| Exons       | 1460..1957   |         |                     |
| GI Descrip. | '4884524/dbj BAA77780.1  5.0e-64 (AB027427) class III chitinase homologue (OsChib3H-h) [Oryza sativa]' |         |                     |

  

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22769  | Seq. ID | OJ990715_06.9A01.C1 |
| Gene No.    | 47334  | Strand  | +                   |
| Start       | 4546   | End     | 7090                |
| Name        | OJ990715_06.9A01.C1.o3.gp  | Method  | AAT/GAP             |
| Start       | 4432   | End     | 5595                |
| GI          | 111_3.R1084  | Score   | 2218                |
| Exons       | 4432..5595   |         |                     |
| GI Descrip. | '2696221/dbj BAA23806  1.0e-163 (D55708) chitinase [Oryza sativa]' |         |                     |



|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22769  | Seq. ID | OJ990715_06.9A01.C1 |
| Gene No.    | 47334  | Strand  | +                   |
| Start       | 4546   | End     | 7090                |
| Name        | OJ990715_06.9A01.C1.o1.np  | Method  | AAT/NAP             |
| Start       | 4546   | End     | 5421                |
| GI          | 2696221  | Score   | 1513                |
| Exons       | 4546..5421   |         |                     |
| GI Descrip. | (D55708) chitinase [Oryza sativa]                                    |         |                     |
|             |  |         |                     |
| Seq. No.    | 22769  | Seq. ID | OJ990715_06.9A01.C1 |
| Gene No.    | 47334  | Strand  | +                   |
| Start       | 4546   | End     | 7090                |
| Name        | OJ990715_06.9A01.C1.o2.gs  | Method  | GENSCAN             |
| Start       | 4546   | End     | 7090                |
| GI          | none   | Score   | .51                 |
| Exons       | 4546..5307, 5760..5837, 5953..6149, 6729..6791, 7024..7090           |         |                     |
|             |  |         |                     |
| Seq. No.    | 22769  | Seq. ID | OJ990715_06.9A01.C1 |
| Gene No.    | 47335  | Strand  | +                   |
| Start       | 7380   | End     | 8473                |
| Name        | OJ990715_06.9A01.C1.o4.gp  | Method  | AAT/GAP             |
| Start       | 7313   | End     | 8473                |
| GI          | 111_4.R1084  | Score   | 2302                |
| Exons       | 7313..8473   |         |                     |
| GI Descrip. | '2696225/dbj BAA23808  1.0e-165 (D55710) chitinase [Oryza sativa]'   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22769  | Seq. ID | OJ990715_06.9A01.C1 |
| Gene No.    | 47335  | Strand  | +                   |
| Start       | 7380   | End     | 8473                |
| Name        | OJ990715_06.9A01.C1.o2.np  | Method  | AAT/NAP             |
| Start       | 7380   | End     | 8246                |
| GI          | 2696225  | Score   | 1537                |
| Exons       | 7380..8246   |         |                     |
| GI Descrip. | (D55710) chitinase [Oryza sativa]                                    |         |                     |
|             |  |         |                     |
| Seq. No.    | 22769  | Seq. ID | OJ990715_06.9A01.C1 |
| Gene No.    | 47335  | Strand  | +                   |
| Start       | 7380   | End     | 8473                |
| Name        | OJ990715_06.9A01.C1.o3.gs  | Method  | GENSCAN             |
| Start       | 7380   | End     | 8249                |
| GI          | none   | Score   | 1                   |
| Exons       | 7380..8249   |         |                     |
|             |  |         |                     |
| Seq. No.    | 22769  | Seq. ID | OJ990715_06.9A01.C1 |
| Gene No.    | 47336  | Strand  | +                   |
| Start       | 10985  | End     | 11357               |
| Name        | OJ990715_06.9A01.C1.o3.np  | Method  | AAT/NAP             |
| Start       | 10985  | End     | 11357               |
| GI          | 4884522  | Score   | 478                 |
| Exons       | 10985..11357   |         |                     |
| GI Descrip. | (AB027426) class III chitinase homologue (OsChib3H-g) [Oryza sativa] |         |                     |
|             |  |         |                     |
| Seq. No.    | 22769  | Seq. ID | OJ990715_06.9A01.C1 |
| Gene No.    | 47337  | Strand  | -                   |
| Start       | 2069   | End     | 11443               |

Name OJ990715\_06.9A01.C1.ol.tw Method TBLASTX:Wheat  
 Start 1615 End 11281  
 GI none Score 120  
 Exons 1615..1713, 1616..1714, 1715..1819, 1729..1818, 4591..4689,  
 4620..4748, 4636..4749, 4750..4854, 4764..4853, 7466..7573,  
 7467..7574, 7575..7679, 7619..7675, 11039..11170, 11044..11169,  
 11179..11277, 11180..11281

Seq. No. 22769 Seq. ID OJ990715\_06.9A01.C1  
 Gene No. 47337 Strand -  
 Start 2069 End 11443  
 Name OJ990715\_06.9A01.C1.o2.tm Method TBLASTX:Maize  
 Start 1615 End 11347  
 GI none Score 151  
 Exons 1615..1719, 1616..1720, 1712..1819, 1723..1818, 1820..1885,  
 4621..4686, 4638..4754, 4639..4755, 4747..4854, 4758..4853,  
 4855..4920, 7449..7580, 7457..7573, 7572..7679, 7619..7675,  
 7680..7745, 11059..11169, 11060..11281, 11191..11277,  
 11282..11347

Seq. No. 22769 Seq. ID OJ990715\_06.9A01.C1  
 Gene No. 47337 Strand -  
 Start 2069 End 11443  
 Name OJ990715\_06.9A01.C1.ol.tc Method TBLASTX:Cress  
 Start 1616 End 11443  
 GI none Score 97  
 Exons 1616..1723, 1763..1903, 1937..2026, 2183..2251, 4635..4754,  
 4639..4758, 4797..4937, 4798..4956, 4956..4994, 4957..5046,  
 5047..5166, 5209..5409, 7449..7583, 7623..7766, 7770..7898,  
 7884..8006, 8034..8105, 8115..8231, 11045..11170, 11225..11347,  
 11396..11443

Seq. No. 22769 Seq. ID OJ990715\_06.9A01.C1  
 Gene No. 47337 Strand -  
 Start 2069 End 11443  
 Name OJ990715\_06.9A01.C1.ol.ts Method TBLASTX:Soybean  
 Start 1616 End 11431  
 GI none Score 100  
 Exons 1616..1723, 1618..1719, 1733..1903, 1768..1884, 1946..2026,  
 4651..4758, 4768..4956, 4803..4937, 4960..5052, 5284..5406,  
 7469..7573, 7473..7583, 7620..7766, 7625..7672, 7784..7834,  
 7785..7892, 7902..8006, 8115..8231, 11066..11170, 11195..11350,  
 11396..11431

Seq. No. 22769 Seq. ID OJ990715\_06.9A01.C1  
 Gene No. 47337 Strand -  
 Start 2069 End 11443  
 Name OJ990715\_06.9A01.C1.ol.tm Method TBLASTX:Maize  
 Start 1955 End 8228  
 GI none Score 48  
 Exons 1955..1999, 1988..2257, 2023..2262, 2210..2353, 2260..2361,  
 2261..2374, 2269..2376, 4987..5019, 5020..5055, 5052..5165,  
 5058..5168, 5074..5169, 5175..5291, 5176..5403, 5248..5391,  
 5306..5401, 7833..7931, 7898..8005, 7899..8006, 8006..8110,  
 8007..8111, 8118..8228

Seq. No. 22769 Seq. ID OJ990715\_06.9A01.C1

|             |   |        |         |
|-------------|---|--------|---------|
| Gene No.    | 47337   | Strand | -       |
| Start       | 2069  | End    | 11443   |
| Name        | OJ990715_06.9A01.C1.o2.gp                                       | Method | AAT/GAP |
| Start       | 2069  | End    | 2446    |
| GI          | 3107320   | Score  | 715     |
| Exons       | 2069..2446  |        |         |
| GI Descrip. | 2696225/dbj BAA23808  7.0e-32 (D55710) chitinase [Oryza sativa] |        |         |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22770                     | Seq. ID | OJ990715_06.9A01.C2 |
| Gene No. | 47338                     | Strand  | +                   |
| Start    | 369                       | End     | 1144                |
| Name     | OJ990715_06.9A01.C2.o1.gs | Method  | GENSCAN             |
| Start    | 369                       | End     | 1144                |
| GI       | none                      | Score   | .48                 |
| Exons    | 369..487, 1039..1144      |         |                     |

|          |                                    |         |                     |
|----------|------------------------------------|---------|---------------------|
| Seq. No. | 22771                              | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No. | 47339                              | Strand  | +                   |
| Start    | 1026                               | End     | 1988                |
| Name     | OJ990715_06.9A01.C3.o1.gs          | Method  | GENSCAN             |
| Start    | 1026                               | End     | 1988                |
| GI       | none                               | Score   | .81                 |
| Exons    | 1026..1376, 1430..1607, 1891..1988 |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47340  | Strand  | +                   |
| Start       | 4191   | End     | 4385                |
| Name        | OJ990715_06.9A01.C3.o1.gp  | Method  | AAT/GAP             |
| Start       | 4191   | End     | 4385                |
| GI          | 24989_1.R1084  | Score   | 304                 |
| Exons       | 4191..4385   |         |                     |
| GI Descrip. | '5042437/gb AC007789.1 AC007789 2.0e-13 Oryza sativa BAC T49B20 genomic sequence, complete sequence' |         |                     |

|             |                                    |         |                     |
|-------------|------------------------------------|---------|---------------------|
| Seq. No.    | 22771                              | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47341                              | Strand  | +                   |
| Start       | 4758                               | End     | 5603                |
| Name        | OJ990715_06.9A01.C3.o1.np          | Method  | AAT/NAP             |
| Start       | 4746                               | End     | 5603                |
| GI          | 2696225                            | Score   | 847                 |
| Exons       | 4746..5603                         |         |                     |
| GI Descrip. | (D55710). chitinase [Oryza sativa] |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47341  | Strand  | +                   |
| Start       | 4758   | End     | 5603                |
| Name        | OJ990715_06.9A01.C3.o2.gp  | Method  | AAT/GAP             |
| Start       | 4747   | End     | 5131                |
| GI          | 122_1.R1084  | Score   | 761                 |
| Exons       | 4747..5131   |         |                     |
| GI Descrip. | '4884522/dbj BAA77779.1  2.0e-55 (AB027426) class III chitinase homologue (OsChib3H-g) [Oryza sativa]' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22771                     | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No. | 47341                     | Strand  | +                   |
| Start    | 4758                      | End     | 5603                |
| Name     | OJ990715_06.9A01.C3.o3.gs | Method  | GENSCAN             |

Start 4758  
GI none  
Exons 4758..5600

End 5600  
Score .51

Seq. No. 22771 Seq. ID OJ990715\_06.9A01.C3  
Gene No. 47342 Strand +  
Start 10621 End 11535  
Name OJ990715\_06.9A01.C3.o2.np Method AAT/NAP  
Start 10621 End 11532  
GI 2696229 Score 1651  
Exons 10621..11532  
GI Descrip. (D55712) chitinase [Oryza sativa] gi|4884494|dbj|BAA77768.1|  
(AB027415) class III chitinase homologue (OsChib3H-a)H- [Oryza  
sativa] gi|4884496|dbj|BAA77769.1| (AB027416) class III  
chitinase homologue (OsChib3H-a) [Oryza sativa]  
gi|4884498|dbj|BAA77770.1| (AB027417) class III chitinase  
homologue (OsChib3H-a) [Oryza sativa] gi|4884506|dbj|BAA77771.1|  
(AB027418) class III ch

Seq. No. 22771 Seq. ID OJ990715\_06.9A01.C3  
Gene No. 47342 Strand +  
Start 10621 End 11535  
Name OJ990715\_06.9A01.C3.o6.gs Method GENSCAN  
Start 10621 End 11535  
GI none Score .96  
Exons 10621..11535

Seq. No. 22771 Seq. ID OJ990715\_06.9A01.C3  
Gene No. 47343 Strand +  
Start 31473 End 37069  
Name OJ990715\_06.9A01.C3.o14.gs Method GENSCAN  
Start 31473 End 37069  
GI none Score .62  
Exons 31473..31614, 33257..34286, 35920..36011, 36966..37069

Seq. No. 22771 Seq. ID OJ990715\_06.9A01.C3  
Gene No. 47344 Strand +  
Start 37998 End 42633  
Name OJ990715\_06.9A01.C3.o6.np Method AAT/NAP  
Start 37995 End 42633  
GI 3549691 Score 126  
Exons 37995..38126, 38165..38282, 40113..40378, 42613..42633  
GI Descrip. (AJ010501) thaumatin-like protein PR-5b [Cicer arietinum]

Seq. No. 22771 Seq. ID OJ990715\_06.9A01.C3  
Gene No. 47344 Strand +  
Start 37998 End 42633  
Name OJ990715\_06.9A01.C3.o15.gs Method GENSCAN  
Start 37998 End 38636  
GI none Score 1  
Exons 37998..38636

Seq. No. 22771 Seq. ID OJ990715\_06.9A01.C3  
Gene No. 47344 Strand +  
Start 37998 End 42633  
Name OJ990715\_06.9A01.C3.o16.gs Method GENSCAN  
Start 39858 End 40478

|             |  |         |                     |
|-------------|--|---------|---------------------|
| GI          | none   | Score   | .53                 |
| Exons       | 39858..40478   |         |                     |
| Seq. No.    | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47344  | Strand  | +                   |
| Start       | 37998  | End     | 42633               |
| Name        | OJ990715_06.9A01.C3.o6.gp  | Method  | AAT/GAP             |
| Start       | 40307  | End     | 40660               |
| GI          | 5039059  | Score   | 617                 |
| Exons       | 40307..40660   |         |                     |
| Seq. No.    | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47344  | Strand  | +                   |
| Start       | 37998  | End     | 42633               |
| Name        | OJ990715_06.9A01.C3.o17.gs   | Method  | GENSCAN             |
| Start       | 40803  | End     | 42440               |
| GI          | none   | Score   | .5                  |
| Exons       | 40803..41303, 41898..42440   |         |                     |
| Seq. No.    | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47344  | Strand  | +                   |
| Start       | 37998  | End     | 42633               |
| Name        | OJ990715_06.9A01.C3.o7.np  | Method  | AAT/NAP             |
| Start       | 42270  | End     | 42413               |
| GI          | 6587837  | Score   | 124                 |
| Exons       | 42270..42413   |         |                     |
| GI Descrip. | (AC006551) Similar to zinc finger protein [Arabidopsis thaliana]                                       |         |                     |
| Seq. No.    | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47345  | Strand  | +                   |
| Start       | 46563  | End     | 49087               |
| Name        | OJ990715_06.9A01.C3.o19.gs   | Method  | GENSCAN             |
| Start       | 46563  | End     | 49087               |
| GI          | none   | Score   | .53                 |
| Exons       | 46563..46607, 46850..46927, 47642..47768, 48855..49087   |         |                     |
| Seq. No.    | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47346  | Strand  | +                   |
| Start       | 49684  | End     | 50198               |
| Name        | OJ990715_06.9A01.C3.o8.gp  | Method  | AAT/GAP             |
| Start       | 49684  | End     | 50198               |
| GI          | none   | Score   | 981                 |
| Exons       | 49684..50198   |         |                     |
| Seq. No.    | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47347  | Strand  | +                   |
| Start       | 50225  | End     | 58408               |
| Name        | OJ990715_06.9A01.C3.o9.np  | Method  | AAT/NAP             |
| Start       | 50225  | End     | 58408               |
| GI          | 4874273  | Score   | 136                 |
| Exons       | 50225..50288, 57994..58065, 58221..58408   |         |                     |
| GI Descrip. | (AC007354) Similar to gi 3128199 F4I1.5 putative proteinase from Arabidopsis thaliana BAC gb AC004521. |         |                     |
| Seq. No.    | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47348  | Strand  | -                   |
| Start       | 3298   | End     | 4603                |

|       |                                    |        |         |
|-------|------------------------------------|--------|---------|
| Name  | OJ990715_06.9A01.C3.o2.gs          | Method | GENSCAN |
| Start | 3298                               | End    | 4603    |
| GI    | none                               | Score  | .87     |
| Exons | 3298..3669, 4387..4438, 4551..4603 |        |         |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22771                     | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No. | 47349                     | Strand  | -                   |
| Start    | 6256                      | End     | 7203                |
| Name     | OJ990715_06.9A01.C3.o3.gp | Method  | AAT/GAP             |
| Start    | 6051                      | End     | 6758                |
| GI       | none                      | Score   | 1340                |
| Exons    | 6051..6758                |         |                     |

|          |  |         |                     |
|----------|--|---------|---------------------|
| Seq. No. | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No. | 47349  | Strand  | -                   |
| Start    | 6256   | End     | 7203                |
| Name     | OJ990715_06.9A01.C3.o4.gs                      | Method  | GENSCAN             |
| Start    | 6256   | End     | 7203                |
| GI       | none   | Score   | .72                 |
| Exons    | 6256..6310, 6347..6476, 6604..6854, 7157..7203 |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22771                     | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No. | 47350                     | Strand  | -                   |
| Start    | 9323                      | End     | 10165               |
| Name     | OJ990715_06.9A01.C3.o5.gs | Method  | GENSCAN             |
| Start    | 9323                      | End     | 10165               |
| GI       | none                      | Score   | .57                 |
| Exons    | 9323..9334, 10094..10165  |         |                     |

|             |  |         |                     |
|-------------|--|---------|---------------------|
| Seq. No.    | 22771  | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No.    | 47351  | Strand  | -                   |
| Start       | 10529  | End     | 11765               |
| Name        | OJ990715_06.9A01.C3.o4.gp  | Method  | AAT/GAP             |
| Start       | 10529  | End     | 11765               |
| GI          | 111_1.R1084  | Score   | 2429                |
| Exons       | 10529..11765   |         |                     |
| GI Descrip. | '2696229/dbj BAA23810  0.0e+00 (D55712) chitinase [Oryza sativa]<br>>gi_4884494_dbj_BAA77768.1_ (AB027415) class III chitinase<br>homologue (OsChib3H-a)H- [Oryza sativa]<br>>gi_4884496_dbj_BAA77769.1_ (AB027416) class III chitinase<br>homologue (OsChib3H-a) [Oryza sativa]<br>>gi_4884498_dbj_BAA77770.1_ (AB027417) class III chitinase<br>homologue (OsChib3H-a) [Oryza sativa]<br>>gi_4884506_dbj_BAA77771.1_ (A' |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22771                     | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No. | 47352                     | Strand  | -                   |
| Start    | 12831                     | End     | 16630               |
| Name     | OJ990715_06.9A01.C3.o7.gs | Method  | GENSCAN             |
| Start    | 12831                     | End     | 13835               |
| GI       | none                      | Score   | .52                 |
| Exons    | 12831..13835              |         |                     |

|          |                           |         |                     |
|----------|---------------------------|---------|---------------------|
| Seq. No. | 22771                     | Seq. ID | OJ990715_06.9A01.C3 |
| Gene No. | 47352                     | Strand  | -                   |
| Start    | 12831                     | End     | 16630               |
| Name     | OJ990715_06.9A01.C3.o3.np | Method  | AAT/NAP             |